All you ever wanted to know about Usenet

Forward from the year 2020

What year is it?

When you go into your local new bookstore, that is if you still have one around, you might find yourself in the technical book section. You'll find 1000+ page books on the latest latest popular programming languages, "For Dummies" books, and Certification Study books. These books are not written to be kept around for years and yet their prices would tell you that isn't so. Today's MCSE or Cisco certification guide is tomorrow's recycling fodder. The technology moves along, the certification exams evolve and these technical books are forgotten. Some end up in used bookstores. Some of these books linger for years in plastic bins in the attic but mostly once the test is passed, they are just thrown out because they are deemed to be worthless.

The textfiles that are included in this ebook would seem to fit in this category. Some, maybe all of them, are older than your are. They talk about old technologies like UUCP that are nearly dead and forgotten. They center around Usenet which is the original long-form discussion medium on the Internet. Usenet is actually still around and there are still many active groups with great conversations happening.

These files are a glimpse back into the history of the internet and they still have lessons to teach us today. I am writing this at the beginning of summer in the year 2020. I find myself writing, reading, and researching Usenet. Is this an anachronism? Perhaps. Or perhaps, I am digging up the still living remains of something great. Enjoy these files, learn something from them, and apply it to the Internet that you use every day.

Introduction

This list of Usenet Files was compiled in order that you can get the best out of Usenet while at the same time following the basic Network Rules. Many a times there have been complaints from the Usenet Community about the new users not following the proper Nettiquette or are unaware of the documentation available on the subject. This is an attempt to demystify Usenet. More installments and updates will follow.

In the previous releases, I tried to keep the contents of this ZIP simple but believe that it wouldn't hurt to add some documents of a more technical nature. RFC822 and RFC1153 attempt to show some more technical aspects of Usenet.

I also upload the latest Canadian and World UUCP maps to CRS. Look for UCAN0791.ZIP and UMAP9107.ZIP. These are July 91 Canadian and World Usenet maps.

You can find me on Canada Remote Systems in Toronto, in Usenet Conference 8, where I am one of the Conference Coordinators. If you have any further questions contact me at one of the following

email addresses:

jzl@micasa.guild.org jack.lupic@canrem.uucp

Jack Lupic Scarborough Ontario, Canada Sat 07-27-1991 18:03 EDT

NOTICE: These compilations are the property of Jack Lupic and are copyrighted. They may be used for personal purposes only. They may not be incorporated in other disk listings, nor altered in any manner. This notice must remain a part of any use of these listings.

Previous Editions:

- 1. USENET1.ZIP August 1990
- 2. USENET2.ZIP February 1991
- 3. USNT9105.ZIP May 1991

Introduction to news.announce

Path: blister!jtsv16!torsqnt!news-server.csri.toronto.edu!rpi!zaphod.mps.ohio-

state.edu!samsung!news.cs.indiana.edu!purdue!spaf

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers Subject: Introduction to news.announce Message-ID: <15394@ector.cs.purdue.edu>

Date: 25 Jul 91 23:15:50 GMT Expires: 23 Oct 91 23:15:50 GMT

Organization: Dept. of Computer Sciences, Purdue Univ.

Lines: 74

Approved: spaf@cs.purdue.EDU

Supersedes: <14690@ector.cs.purdue.edu>

Original-from: mark@stargate.com (Mark Horton)

[Most recent change: 19 May 1991 by msb@sq.com (Mark Brader)]

The news.announce hierarchy contains the four moderated newsgroups news.announce.important, news.announce.newgroups, news.announce.newusers, and news.announce.conferences.

"news.announce.important" is a newsgroup for just what it says it is -important announcements. It is intended to be read by everyone on
Usenet, although nobody is forced to subscribe. To post to
news.announce.important, send mail to the moderator at
"announce@stargate.com". Some netnews implementations will
automatically mail to the moderator anything posted instead of
attempting to post it directly. If the message is appropriate, it will
be posted by the moderator; if not, the moderator will suggest a more
appropriate place to post it or a better way to go about the same
goal.

Discussions in news.announce.important are explicitly forbidden, and the volume of traffic will be kept low enough to keep people from feeling a need to unsubscribe. Usenet administrators for each site should make a point of reading news.announce.important.

The current policy is that news.announce.important submissions must be:

- (a) short preferably they should fit on one crt screen, including headers.
- (b) important enough to at least have their header shown to everyone on the net. The posting should be more of benefit to the net than to the poster.
- (c) not posted to any other newsgroup news.announce.important by itself is supposed to be sufficient to reach everybody, and nobody should have to read an announcement more than once.
- (d) signed the author should be clearly evident.
- (e) not commercial, political, or religious in nature.

news.announce.newgroups exists for announcements of either the creation or the consideration of a new newsgroup. All calls for votes, calls for discussions, vote results, and creation notices of all hierarchies should be posted to news.announce.newgroups. Submissions should be directed to announce-newgroups@rpi.edu (or to your nearest major site). Followups will be redirected to news.groups.

Some messages will be repeated every month, in order to reach all newcomers. These messages will be placed in news.announce.newusers, which is also moderated. This makes it safe for experienced users who have already read these messages to unsubscribe to news.announce.newusers without missing anything new in news.announce.important. If you aren't familiar with the netnews guidelines in news.announce.newusers, please read them carefully. Your understanding of these rules will assure that you don't annoy the more than 1 million members of the net community (estimated) by unintentionally abusing the net, and will help you get more value from the net.

news.announce.conference is for announcements of conference programs, calls for papers, and things of that kind. Submissions should be directed to nac@tekbspa.tss.com. Please keep Subject lines informative; if space permits, mention the topic and location there, and avoid acronyms unless very widely known.

Mark Horton news.announce.important moderator mark@stargate.com

news.announce.newusers moderator spaf@purdue.edu Dennis Page

Gene Spafford

David Lawrence news.announce.newgroups moderator tale@rpi.edu

news.announce.conferences denny@tekbspa.tss.com

--

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center, Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398 Internet: spaf@cs.purdue.edu phone: (317) 494-7825

Rules for posting to Usenet

Path: blister!jtsv16!torsqnt!news-server.csri.toronto.edu!rpi!zaphod.mps.ohio-

state.edu!samsung!news.cs.indiana.edu!purdue!spaf

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers Subject: Rules for posting to Usenet Message-ID: <15395@ector.cs.purdue.edu>

Date: 25 Jul 91 23:15:51 GMT Expires: 23 Oct 91 23:15:51 GMT

Organization: Dept. of Computer Sciences, Purdue Univ.

Lines: 190

Approved: spaf@cs.purdue.EDU

Supersedes: <14691@ector.cs.purdue.edu>

Original-from: mark@stargate.com (Mark Horton)

[Most recent change: 7 Nov 1990 by spaf@cs.purdue.edu (Gene Spafford)]

This message describes some of the rules of conduct on Usenet. The rules vary depending on the newsgroup.

Some newsgroups are intended for discussions and some for announcements or queries. It is not usually a good idea to carry on discussions in newsgroups that are designated otherwise. It is never a good idea to carry on "meta-discussions" about whether a given discussion is appropriate -- such traffic mushrooms until nobody can find articles that belong. If you are unhappy with what some user said, send him/her mail, don't post it.

Before posting, think about where your article is going. If it's posted to a "comp", "news", "misc", "soc", "sci", "rec" or "talk" newsgroup, it will probably go to the USA, Canada, Europe, Australia, and many countries in Asia. Certain articles are only of local interest (e.g. used car ads) and it is inappropriate to post them to the whole world. Use the "Distribution" feature to restrict distribution to your local area. If you don't know how to use this feature, read "Frequently Submitted Items" in another article in news.announce.newusers. (Note, however, that some sites have broken software or improperly configured news systems, so sometimes use of a "Distribution" header may not work.)

Don't post announcements regarding major news events (e.g. the space shuttle has just exploded!) to news groups. By the time most people receive such items, they will long since have been informed by conventional media. If you wish to discuss such an event on the net, use the "misc.headlines" newsgroup.

Announcement of professional products or services on Usenet is allowed; however, since someone else is paying the phone bills for this, it is important that it be of overall benefit to Usenet. Post to the appropriate newsgroup -- comp.newprod -- never to a general purpose newsgroup such as "misc.misc". Clearly mark your article as a product announcement in the subject. Never repeat these -- one article per product at the most; preferably group everything into one article. Advertising hype is especially frowned upon -- stick to technical facts. Obnoxious or inappropriate announcements or articles violating this policy will generally be rejected. This policy is, of course, subject to change if it becomes a problem.

Some newsgroups are moderated. In these groups, you cannot post directly, either by convention or because the software prevents it. To post to these newsgroups, send mail to the moderator. Examples:

Newsgroup Moderator Purpose

news.announce.important stargate!announce Important announcements for everyone comp.std.unix uunet!std-unix Unix standards discussion comp.std.mumps plus5!std-mumps ANSI Mumps standards discussion comp.unix zorba!modunix Discussion of Unix* features and bugs

Some newsgroups have special purpose rules:

Newsgroup Rules

news.announce.important Moderated, no direct postings, important things only. misc.wanted Queries, "I want an x", "Anyone want my x?". No

discussions. Don't post to more than one xxx.wanted.
Use the smallest appropriate wanted (e.g. used car ads to nj.wanted.)

Requests for sources, termcaps, etc. should go to the

"comp.sources.wanted" newsgroup.

rec.humor Clean humor only; anything offensive must be rotated; no discussions -- humor only. Discussions go in rec.humor.d

rec.arts.movies Don't post anything revealing part of a movie without marking it (spoiler) in the subject.

rec.arts.* Same as movies -- mark spoilers in the subject line.
news.groups Discussions about new groups: whether to create

them and what to call them. Don't post yes/no

votes, mail them to the author

misc.test Use the smallest test group possible, e.g.
"test" or "uch test" Say in the body of the

"test" or "ucb.test". Say in the body of the message what you are testing.

It is perfectly legal to reproduce short extracts of a copyrighted work for critical purposes, but reproduction in whole is strictly and explicitly forbidden by US and international copyright law. (Otherwise, there would be no way for the artist to make money, and there would thus be less motive for people to go to the trouble of making their art available at all. The crime of theft is as serious in this context as any other, even though you may not have to pick locks, mask your face, or conceal merchandise.)

All opinions or statements made in messages posted to Usenet should be taken as the opinions of the person who wrote the message. They do not necessarily represent the opinions of the employer of that person, the owner of the computer from which the message was posted, or anyone involved with Usenet or the underlying networks of which Usenet is made up. All responsibility for statements made in Usenet messages rests with the individual posting the message.

Posting of information on Usenet is to be viewed as similar to publication. Because of this, do not post instructions for how to do some illegal act (such as jamming radar or obtaining cable TV service illegally); also do not ask how to do illegal acts by posting to the net.

If you have a standard signature you like to append to your articles, put it in a file called .signature in your home directory. "postnews" and "inews" will automatically append it to your article. Please keep your signatures concise, as people do not appreciate seeing lengthy signatures, nor paying the phone bills to repeatedly transmit them. 2 or 3 lines are usually plenty. Sometimes it is also appropriate to add another line or two for addresses on other major networks where you can be reached (e.g., Internet, Bitnet). Long signatures are definitely frowned upon. DO NOT include drawings, pictures, maps, or other graphics in your signature -- it is not the appropriate place for such material and is viewed as rude by other readers.

If you post an article and remember something you've left out or realize you've made a factual error, you can cancel the article and (if canceled quickly enough) prevent its distribution. Then you can correct whatever was wrong and post a new copy. In "rn" and "readnews", an article that you posted can be canceled with the "C" command. Be aware, however, that some people may have already read the incorrect version so the sooner you cancel something, the better.

If the news system rejects a followup due to "more quoted lines than new text," please do not use "filler" lines to make up for this. Instead, if after careful editing, you have more to quote than to

write, change the citation character. For example, in the display editor vi, you could use the incantation:

:%s/^>/</

Be careful not to do the very similar:

:%s/>/</

which will affect >'s that are not being used as the citation character. (In particular, it will damage the "References" line in the article header.)

In preparing an article, be aware that other people's machines are not the same as yours. The following is a list of things to keep in mind:

- * Except for source, keep your lines under 80 characters, and under 72 if possible. (most editors have a fill or format mode that will do this for you automatically)
- * Right justified text may look "prettier" in some sense, but it is almost always harder to read than leaving ragged right margins; don't justify your articles.
- * Most special control characters will not work for most readers. In fact, the space character is about the only one you can be sure will work consistently. Even tabs aren't always the same from machine to machine, and should be avoided. Many mail agents will strip or remap control characters.
- * Pictures and diagrams should not use embedded tabs.
- * Refer to articles by Message-ID, and never by article number.
- * What you think is the previous article is unlikely to be so elsewhere.
- * Submissions in a single case (all upper or all lower) are difficult to read.

In general, when a mailing to somebody fails, DON'T post a message about it! Think for a moment: you are trying to send something to someone on ONE system. Your message might go through (at most) TEN systems on the way there. Posting a message in the news sends it to over 7800 systems throughout the world! There is no way to justify adding to the news load of nearly 8000 machines simply because you cannot determine how to get your mail through.

If your message is important, contact someone who knows more about the mail system and who might be able to help you get your message through. Your local system administrator, for instance, or the admin of the next site "upstream," might be able to help. You can also send mail to "postmaster" at one of the major Usenet sites. Almost all of these people would rather see an occasional plea for help in their mailbox than read another broadcast in the news system. If your message is *really* important, pick up the phone and try to call the other person.

- -

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center, Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398 Internet: spaf@cs.purdue.edu phone: (317) 494-7825

Answers to Frequently Asked Questions

Path: blister!jtsv16!torsqnt!news-

server.csri.toronto.edu!rpi!think.com!samsung!news.cs.indiana.edu!purdue!spaf

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers

Subject: Answers to Frequently Asked Questions

Message-ID: <15398@ector.cs.purdue.edu>

Date: 25 Jul 91 23:15:55 GMT Expires: 23 Oct 91 23:15:54 GMT

Organization: Dept. of Computer Sciences, Purdue Univ.

Lines: 674

Approved: spaf@cs.purdue.EDU

Supersedes: <14694@ector.cs.purdue.edu>

Original-from: jerry@eagle.UUCP (Jerry Schwarz)

[Most recent change: 23 Jul 1991 by spaf@cs.purdue.edu (Gene Spafford)]

Frequently Submitted Items

This document discusses some questions and topics that occur repeatedly on USENET. They frequently are submitted by new users, and result in many followups, sometimes swamping groups for weeks. The purpose of this note is to head off these annoying events by answering some questions and warning about the inevitable consequence of asking others. If you don't like these answers let spaf@cs.purdue.edu know.

Note that some newsgroups have their own special "Frequent Questions & Answers" posting. You should read a group for a while before posting any questions, because the answers may already be present. Comp.unix.questions and comp.unix.internals are examples -- Steve Hayman regularly posts an article that answers common questions, including some of the ones asked here.

This list is often referred to as FAQ -- the Frequently Asked Questions. If you are a new user of the Usenet and don't find an answer to your questions here, you can try asking in the news.newusers.questions group.

Contents

=======

- 1. What does UNIX stand for?
- 2. What is the derivation of "foo" as a filler word?
- 3. Is a machine at "foo" on the net?
- 4. What does "rc" at the end of files like .newsrc mean?
- 5. What does :-) mean?
- 6. How do I decrypt jokes in rec.humor?

- 7. misc.misc or misc.wanted: Is John Doe out there anywhere?
- 8. sci.math: Proofs that 1=0.
- 9. rec.games.*: Where can I get the source for empire or rogue?
- 10. comp.unix.questions: How do I remove files with non-ascii characters in their names?
- 11. comp.unix.internals: There is a bug in the way UNIX handles protection for programs that run suid, or any other report of bugs with standard software.
- 12. Volatile topics, e.g., soc.women: What do you think about abortion?
- 13. soc.singles: What do MOTOS, MOTSS, and MOTAS stand for? What does LJBF mean?
- 14. soc.singles and elsewhere: What does HASA stand for?
- 15. sci.space.shuttle: Shouldn't this group be merged with sci.space?
- 16. How do I use the "Distribution" feature?
- 17. Why do some people put funny lines ("bug killers") at the beginning of their articles?
- 18. What is the address or phone number of the "foo" company?
- 19. What is the origin of the name "grep"?
- 20. How do I get from BITNET to UUCP, Internet to BITNET, JANET etc. etc.?
- 21. Didn't some state once pass a law setting pi equal to 3 ?
- 22. Where can I get the necessary software to get a "smart" mail system running on my machine that will take advantage of the postings in comp.mail.maps? (E.g., pathalias, smail, etc.)
- 23. What is "food for the NSA line-eater"?
- 24. Does anyone know the {pinouts, schematics, switch settings, what does jumper J3 do} for widget X?
- 25. What is "anonymous ftp"?
- 26. What is UUNET?
- 27. Isn't the posting mechanism broken? When I post an article to both a moderated group and unmoderated groups, it gets mailed to the moderator and not posted to the unmoderated groups.
- 28. comp.arch and elsewhere: What do FYI and IMHO mean?
- 29. Would someone repost {large software distribution}?
- 30. How do I contact the moderator of an Internet mailing list rather than post to the entire list?
- 31. I see BTW (or "btw"), wrt and RTFM in postings. What do they mean?
- 32. Are there any restrictions on posting e-mail someone sends to me?
- 33. What's an FQDN?
- 34. How do you pronounce "char" in C, "ioctl" in UNIX, the character "#", etc., etc.?
- 35. How do you pronounce "TeX"?
- 36. What is the last year of the 20th century A.D.?
- 37. I heard these stories about a dying child wanting postcards/get-well cards/business cards to get in the Guinness Book of World Records. Where can I post the address for people to help?
- 38. I just heard about a scheme the FCC has to implement a tax on modems! Where can I post a message so everyone will hear about this and do something to prevent it?
- 39. Is there a public access Unix system near me? How can I get access to system for news and mail?
- 40. In rec.pets: My pet has suddenly developed the following symptoms

- Is it serious? In sci.med: I have these symptoms Is it serious?
- 41. I have this great idea to make money. Alternatively, wouldn't an electronic chain letter be a nifty idea?
- 42. Where can I get archives of Usenet postings?

Questions and Answers

1. What does UNIX stand for?

It is not an acronym, but is a pun on "Multics". Multics is a large operating system that was being developed shortly before UNIX was created. Brian Kernighan is credited with the name.

2. What is the derivation of "foo" as a filler word?

The favorite story is that it comes from "fubar" which is an acronym for "fouled up beyond all recognition", which is supposed to be a military term. (Various forms of this exist, "fouled" usually being replaced by a stronger word.) "Foo" and "Bar" have the same derivation.

3. Is a machine at "foo" on the net?

These questions belong in news.config (if anywhere), but in fact your best bet is usually to phone somebody at "foo" to find out. If you don't know anybody at "foo" you can always try calling and asking for the "comp center." Also, see the newsgroup comp.mail.maps where maps of USENET and the uucp network are posted regularly. If you have access to telnet, connect to nic.ddn.mil and try the "whois" command.

4. What does "rc" at the end of files like .newsrc mean?

It is related to the phrase "run commands." It is used for any file that contains startup information for a command. The use of "rc" in startup files derives from the /etc/rc command file used to start multi-user UNIX.

5. What does :-) mean?

This is the net convention for a "smiley face". It means that something is being said in jest. If it doesn't look like a smiley face to you, flop your head over to the left and look again. Variants exist and mean related things; for instance, :-(is sad.

6. How do I decrypt jokes in rec.humor?

The standard cypher used in rec.humor is called "rot13." Each

letter is replaced by the letter 13 farther along in the alphabet (cycling around at the end). Most systems have a built-in command to decrypt such articles; readnews and nn have the "D" command, emacs/gnus has the "^C^R" combination, rn has the "X" or "^X" commands, notes has "%" or "R", and VMS news has the read/rot13 command. If your system doesn't have a program to encrypt and decrypt these, you can quickly create a shell script using "tr":

tr A-Za-z N-ZA-Mn-za-m

On some versions of UNIX, the "tr" command should be written as: tr "[a-m][n-z][A-M][N-Z]" "[n-z][a-m][N-Z][A-M]"

7. misc.misc or misc.wanted: Is John Doe out there anywhere?

I suspect that these items are people looking for Freshman roommates that they haven't seen in ten years. If you have some idea where the person is, you are usually better off calling the organization. For example, if you call any Bell Labs location and request John Doe's number they can give it to you even if he works at a different location. If you must try the net, use newsgroup soc.net-people *NOT* misc.misc or misc.wanted. Also, you can try the "whois" command (see item #3).

8. sci.math: Proofs that 1=0.

Almost everyone has seen one or more of these in high school. They are almost always based on either division by 0 or taking the square root of a negative number.

9. rec.games.*: Where can I get the source for empire or rogue?

You can't get the source of rogue. The authors of the game, as is their right, have chosen not to make the sources available. However, several rogue-like games have been posted to the comp.sources.games group and they are available in the archives.

You can obtain the source to a version of empire if you provide a tape and SASE *plus* a photocopy of your UNIX source license. To obtain further info, contact mcnc!rti-sel!polyof!john.
You can also call John at +1 516 454-5191 (9am-9pm EST only).

Sites with Internet access can ftp several versions of empire from site g.ms.uky.edu

Also, please note that the wizards' passwords in games like these are usually system-dependent and it does no good to ask the net-at-large what they are.

10. comp.unix.questions: How do I remove files with non-ascii characters in their names?

You can try to find a pattern that uniquely identifies the file. This sometimes fails because a peculiarity of some shells is that they strip off the highorder bit of characters in command lines. Next, you can try an rm -i, or rm -r. Finally, you can mess around with i-node numbers and "find".

Some Emacs editors allow you to directly edit a directory, and this provides yet another way to remove a file with a funny name (assuming you have Emacs and figure out how to use it!).

To remove a file named "-" from your directory, simply do: rm ./-

11. comp.unix.internals: There is a bug in the way UNIX handles protection for programs that run suid, or any other report of bugs with standard software.

There are indeed problems with the treatment of protection in setuid programs. When this is brought up, suggestions for changes range from implementing a full capability list arrangement to new kernel calls for allowing more control over when the effective id is used and when the real id is used to control accesses. Sooner or later you can expect this to be improved. For now you just have to live with it.

Always discuss suspected bugs or problems with your site software experts before you post to the net. It is likely that the bugs have already been reported. They might also be local changes and not something you need to describe to the whole Usenet.

12. Volatile topics, e.g., soc.women: What do you think about abortion?

Although abortion might appear to be an appropriate topic for soc.women, more heat than light is generated when it is brought up. All abortion-related discussion should take place in the newsgroup talk.abortion. If your site administrators have chosen not to receive this group, you should respect this and not post articles about abortion at all.

This principle applies to other topics: religious upbringing of children should be restricted to talk.religion.misc and kept out of misc.kids. Similarly, rape discussions should be kept to talk.rape and not in soc.singles, alt.sex and/or soc.women, Zionism discussions should be kept to talk.politics.mideast and not in soc.culture.jewish; likewise, discussions of Jesusor of religions other than Judaism should go to newsgroups for the appropriate religion or to talk.religion.misc or alt.messianic.

USENET newsgroups are named for mostly historical reasons, and are not intended to be fully general discussion groups for everything about the named topic. Please accept this and post

articles in their appropriate forums.

13. soc.singles: What do MOTOS, MOTSS, MOTAS, and SO stand for? What does LJBF mean?

Member of the opposite sex, member of the same sex, and member of the appropriate sex, respectively. SO stands for "significant other."

LJBF means "Let's just be friends." This phrase is often heard when you least want it.

14. soc.singles and elsewhere: What does HASA stand for?

The acronym HASA originated with the Heathen and Atheistic SCUM Alliance; the Hedonistic Asti-Spumante Alliance, Heroes Against Spaghetti Altering, the Society for Creative Atheism (SCATHE), SASA, SALSA, PASTA, and many others too numerous to mention all followed. HASA started in (what is now) talk.religion.misc and also turns up in soc.singles, talk.bizarre, et al. because members post there too.

15. sci.space.shuttle: Shouldn't this group be merged with sci.space?

No. sci.space.shuttle is for timely news bulletins. sci.space is for discussions.

16. How do I use the "Distribution" feature?

When postnews prompts you for a distribution, it's asking how widely distributed you want your article. The set of possible replies is different, depending on where you are, but at Bell Labs in Murray Hill, New Jersey, possibilities include (for example): local local to this machine mh Bell Labs, Murray Hill Branch nj all sites in New Jersey btl All Bell Labs machines att All AT&T machines usa Everywhere in the USA na Everywhere in North America world Everywhere on USENET in the world

If you hit return, you'll get the default, which is usually "world.". This default is often not appropriate -- PLEASE take a moment to think about how far away people are likely to be interested in what you have to say. Used car ads, housing wanted ads, and things for sale other than specialized equipment like computers certainly shouldn't be distributed to Europe and Korea, or even to the next state.

It is generally not possible to post an article to a distribution

that your own machine does not receive. For instance, if you live in Indiana, you can't post an article for distribution only in New Jersey or Germany unless your site happens to exchange those particular distributions with another site. Try mailing the article to someone in the appropriate area and asking them to post it for you.

17. Why do some people put funny lines ("bug killers") at the beginning of their articles?

Some earlier versions (mid-80s) of news had a bug which would drop the first 512 or 1024 bytes of text of certain articles. The bug was triggered whenever the article started with whitespace (a blank or a tab). A fix many people adopted was to begin their articles with a line containing a character other than white space. This gradually evolved into the habit of including amusing first lines.

The original bug has since been fixed in newer version of news, and sites running older versions of news have applied a patch to prevent articles from losing text. The "bug-killer" lines are therefore probably no longer needed, but they linger on.

18. What is the address or phone number of the "foo" company?

Try the white and yellow pages of your phone directory, first; a sales representative will surely know, and if you're a potential customer they will be who you're looking for. Phone books for other cities are usually available in libraries of any size. Whoever buys or recommends things for your company will probably have some buyer's guides or national company directories. Call or visit the reference desk of your library; they have several company and organization directories and many will answer questions like this over the phone. Remember if you only know the city where the company is, you can telephone to find out their full address or a dealer. Calls to 1-800-555-1212 will reveal if the company has an "800" number you can call for information. The network is NOT a free resource, although it may look like that to some people. It is far better to spend a few minutes of your own time researching an answer rather than broadcast your laziness and/or ineptitude to the net.

19. What is the origin of the name "grep"?

The original UNIX text editor "ed" has a construct g/re/p, where "re" stands for a regular expression, to Globally search for matches to the Regular Expression and Print the lines containing them. This was so often used that it was packaged up into its own command, thus named "grep". According to Dennis Ritchie, this is the true origin of the command.

20. How do I get from BITNET to UUCP, Internet to BITNET, JANET etc.?

There are so many networks and mail systems in use now, it would take a book to describe all of them and how to send mail between them. Luckily, there are a couple of excellent books that do exactly that, and in a helpful, easy-to-use manner:

"!%@:: A Directory of Electronic Mail Addressing & Networks" by Donnalyn Frey and Rick Adams, O'Reilly & Associates, Inc, 2nd edition 1990.

"The Matrix: Computer Networks and Conferencing Systems Worldwide" by John Quarterman, Digital Press, 1990.

Another excellent book to have on your bookshelf (to keep those two company) is "The User's Directory of Computer Networks" edited by Tracy LaQuey, Digital Press, 1990.

21. Didn't some state once pass a law setting pi equal to 3 ?

Indiana House Bill #246 was introduced on 18 January 1897, and referred to the Committee on Canals "midst general cheerfulness." The text states, "the ratio of the diameter and circumference is as five-fourths to four", which makes pi 3.2 (not 3), but there are internal contradictions in the bill as well as contradictions with reality. The author was a mathematical crank. The bill was passed by the state House on 5 February, but indefinitely tabled by the state Senate, in part thanks to the fortuitous presence on other business of a Purdue professor of mathematics.

For details, including an annotated text of the bill, read the article by D. Singmaster in "The Mathematical Intelligencer" v7 #2, pp 69-72.

22. Where can I get the necessary software to get a "smart" mail system running on my machine that will take advantage of the postings in comp.mail.maps? (E.g., pathalias, smail, etc.)

There are a couple of packages available through the supporters of the comp.sources.unix archives. If sites next to you don't have what you want, contact your nearest comp.sources.unix archive, or the moderator. Information on archive sites, and indices of comp.sources.unix back issues are posted regularly in comp.sources.unix and comp.sources.d.

23. What is "food for the NSA line-eater"?

This refers to the alleged scanning of all USENET traffic by the National Security Agency (and possibly other intelligence organizations) for interesting keywords. The "food" is believed to contain some of those keywords in the fond hope of overloading

NSA's poor computers. A little thought should convince anyone that this is unlikely to occur. Other posters have taken up this practice, either as an ambiguous form of political statement, or as an attempt at humor. The bottom line is that excessive signatures in any form are discouraged, the joke has worn stale amongst long-time net readers, and there are specific newsgroups for the discussion of politics.

24. Does anyone know the {pinouts, schematics, switch settings, what does jumper J3 do} for widget X?

These postings are almost always inappropriate unless the manufacturer has gone out of business or no longer supports the device. If neither of these is the case, you're likely to get a better and faster response by simply telephoning the manufacturer.

25. What is "anonymous ftp"?

"FTP" stands for File Transfer Protocol; on many systems, it's also the name of a user-level program that implements that protocol. This program allows a user to transfer files to and from a remote network site, provided that network site is reachable via the Internet or a similar facility. (Ftp is also usable on many local-area networks.)

"Anonymous FTP" indicates that a user may log into the remote system as user "anonymous" with an arbitrary password. A common convention is that some sort of identification is supplied as the password, e.g. "mumble@foo". This is sometimes useful to those sites that track ftp usage. Also note that most sites restrict when transfers can be made, or at least suggest that large transfers be made only during non-peak hours.

26. What is UUNET?

UUNET is a non-profit communications service designed to provide access to USENET news, mail, and various source archives at low cost by obtaining volume discounts. Charges are calculated to recover costs.

For more information send your US mail address to info@uunet.uu.net (uunet!info).

27. Isn't the posting mechanism broken? When I post an article to both a moderated group and unmoderated groups, it gets mailed to the moderator and not posted to the unmoderated groups.

This is a question that is debated every few months. The answer is "No, it was designed to work that way." The software is designed so that the moderator can crosspost the article so it

appears in the regular groups as well as the moderated group, if appropriate. If the article were to be posted immediately to the unmoderated groups, the moderated group name would have to be deleted from the header and you would lose the crossposting.

Whether or not this is correct behavior is a matter of opinion. If you want your article to go out immediately to the unmoderated groups, post it twice -- once to the unmoderated groups and once to the moderated groups.

28. comp.arch and elsewhere: What do FYI and IMHO mean?

Those are abbreviations for common phrases. FYI is "For Your Information" and IMHO is "In My Humble Opinion" or "In My Honest Opinion."

29. Would someone repost {large software distribution}?

This question should never be posted unless you are reporting a widespread problem in article propagation. Lamentably, there ARE occasional glitches in article transport. Large source or binary postings, by their sheer size, are an inviting target.

If the problem is isolated, it is much better to take it upon yourself to obtain the bad portions of the program than to ask thousands of sites to spend thousands of dollars to needlessly move several hundred kilobytes of code. There are archive sites around the net that make most source/binary newsgroups available via anonymous FTP and UUCP. If you get desperate, you can always mail the author a blank disk or magnetic tape with provisions for return postage.

30. How do I contact the moderator of an Internet mailing list rather than post to the entire list?

To do this you should know that there are, by convention, two mailing addresses for every mailing list (except where noted by the List of Lists):

list@host (e.g. xpert@athena.mit.edu)
list-request@host (e.g. xpert-request@athena.mit.edu)

When you have something for everyone on the mailing list to read, mail to the list@host address. HOWEVER, if you have an administrative request to make (e.g. "please add me to this list", "please remove me from this list", "where are the archives?", "what is this mailer error I got from sending to this list?"), it should be directed to the list-request@host address, which goes only to the mailing list administrator.

It is considered to be in bad taste to send administrative

requests to the entire mailing list in question, and if (as is often the case) the administrator does not read the mailing list (i.e. he just takes care of the admin tasks for the list), he will not see your request if you don't send it to the right address.

31. I see BTW (or "btw"), wrt and RTFM in postings. What do they mean?

BTW is shorthand for "by the way." WRT is "With respect to".

RTFM is generally used as an admonition and means "read the f*ing manual" (choice of f-words varies according to reader). The implication is that the answer to a query or complaint is easy to find if one looks in the appropriate location FIRST.

32. Are there any restrictions on posting e-mail someone sends to me?

At a minimum, it is only polite for you to contact the author of the letter and secure her or his permission to post it to the net.

On a more serious note, it can be argued that posting someone's e-mail to the net without their permission is a violation of copyright law. Under that law, even though a letter was addressed to you, it does not grant you the right to publish the contents, as that is the work of the author and the author retains copyright (even if no explicit copyright mark appears).

Basically, your letters are your intellectual property. If someone publishes your letters they are violating your copyright. This principle is well-founded in "paper media," and while untested in electronic forums such as Usenet, the same would probably apply if tested in court.

33. What's an FQDN?

A fully-qualified domain name. That is, a hostname containing full, dotted qualification of its name up to the root of the Internet domain naming system tree. Example: uiucuxc is the single-word hostname (suitable for, e.g., UUCP transport purposes) of the machine whose FQDN is uxc.cso.uiuc.edu.

34. How do you pronounce "char" in C, "ioctl" in UNIX, the character "#", etc., etc.?

Opinions differ. Pick pronunciations close to what your colleagues use. After all, they're the ones you need to communicate with.

35. How do you pronounce "TeX"?

To quote Donald Knuth, the creator of TeX: "Insiders pronounce the X of TeX as a Greek chi, not as an 'x', so that TeX rhymes

with the word blecchhh. It's the 'ch' sound in Scottish words like loch or German words like ach; it's a Spanish 'j' and a Russian 'kh'. When you say it correctly to your computer, the terminal may become slightly moist." [The TeXbook, 1986, Addison Wesley, page 1]

36. What is the last year of the 20th century A.D.?

The A.D. (Latin, Anno Domini, In the Year of Our Lord) system was devised before "origin 0 counting" was invented. The year during which Jesus was (incorrectly) assumed to have been born was numbered 1. (The preceding year was 1 B.C.) So the 1st century was 1 to 100, the 2nd was 101 to 200, the 20th is 1901 to 2000. This is standard terminology no matter how much some of you may dislike it. However, "a" century is any span of 100 years; so if you want to celebrate the end of "the century", meaning the 1900's, on December 31, 1999, nobody will stop you. It just isn't the end of the "20th century A.D.".

37. I heard these stories about a dying child wanting postcards/get-well cards/business cards to get in the Guinness Book of World Records. Where can I post the address for people to help?

Post it to "junk," or better yet, don't post it at all. The story of the little boy keeps popping up, even though his mother and the agencies involved have been appealing for people to stop. So many postcards were sent (16 million +) that the agencies involved in the effort don't know what to do with them, and the Guinness people claim they will retire the category from the record books. (See page 24 of the 29 July 1990 NY Times for an article on this.)

If you want to do something noble, donate the cost of a stamp and postcard (or more) to a worthwhile charity like UNICEF or the International Red Cross (Red Crescent/Red Magen David). There are tens of thousands of children dying around the world daily, and they could use more than a postcard.

38. I just heard about a scheme the FCC has to implement a tax on modems! Where can I post a message so everyone will hear about this and do something to prevent it?

Post it the same place as the articles in response to #37, above. This is an old, old story that just won't die. Something like this was proposed many YEARS back and defeated. However, the rumor keeps spreading and people who hear about it for the first time get all upset. Before posting stories like this, check with the organizations involved (like the FCC) to see if the story is true and current.

39. Is there a public access Unix system near me? How can I get

access to system for news and mail?

Phil Eschallier posts a list of open access Unix sites (he calls them "Nixpub" sites) on a regular basis to the following newsgroups: comp.misc and alt.bbs. Check his posting for information on sites you can contact.

40. In rec.pets: My pet has suddenly developed the following symptoms Is it serious? In sci.med: I have these symptoms Is it serious?

Could be. The only way to tell for sure is to see an expert. The network reaches a vast audience with considerable talent, but that can never replace the expert observation and diagnosis of a trained professional. Do yourself or your pet a big favor -- if there is a problem, go see an appropriate practitioner. If there is a serious problem, it is important that it is dealt with promptly.

41. I have this great idea to make money. Alternatively, wouldn't an electronic chain letter be an nifty idea?

In a few words: don't even think about it. Trying to use the net to make vast sums of money or send chain letters is a very bad idea. First of all, it is an inappropriate use of resources, and tends to use up vast amounts of net bandwidth. Second, such usage of the net tends to produce extremely negative reactions by people on the net, adding even more to the volume -- most of it directed to you. Users, particular system admins, do not like that kind of activity, and they will flood your mailbox with notices to that effect.

And last, and perhaps most important, some of this activity is against the law in many places. In the US, you can (and will) be reported by hacked-off system administrators for suspicion of wire fraud or mail fraud. In one incident, at *least* a half dozen people reported the poster to Postal Service inspectors; I'm not sure what the outcome was, but it probably was not a nice experience.

Bottom line: don't try clever schemes to sell things, solicit donations, or run any kind of pyramid or Ponzi scheme. Also, don't start or support electronic chain letters.

42. Where can I get archives of Usenet postings?

Most Usenet newsgroups are not archived in any organized fashion, though it's likely that if you look hard enough someone will have kept much or most of the traffic (either on disk or on some tape gathering dust somewhere). The volume on Usenet is simply too high to keep everything on rotating magnetic media forever, however. The signal-to-noise ratio is too low in many groups to

make then good candidates for archiving.

One person's signal is another person's noise; if you're lucky, you'll find someone who has been keeping the good parts of a particular newsgroup in their own personal stash to save up for later. How to get access to a group that *is* archived depends on what kind of group it is:

- * The "sources" and "binaries" groups are generally archived at multiple sites; for more information about getting access to them, see the posting entitled "Information about finding sources" in comp.sources.wanted.
- * Some non-source newsgroups can be found by asking "archie" about the group name. See the comp.sources.wanted posting mentioned above for information about how to use "archie."
- * In other groups, if the group has a Frequently Asked Questions posting or another periodic posting about the group, check that posting to see if it mentions where the group is archived. If not, then you'll have to post a message in the newsgroup and ask if it is archived anywhere.

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center, Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398 Internet: spaf@cs.purdue.edu phone: (317) 494-7825

A Primer on How to Work With the Usenet Community

Path: blister!jtsv16!torsqnt!news-server.csri.toronto.edu!rpi!zaphod.mps.ohio-

state.edu!samsung!news.cs.indiana.edu!purdue!spaf

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers

Subject: A Primer on How to Work With the Usenet Community

Message-ID: <15397@ector.cs.purdue.edu>

Date: 25 Jul 91 23:15:53 GMT Expires: 23 Oct 91 23:15:53 GMT

Organization: Dept. of Computer Sciences, Purdue Univ.

Lines: 361

Approved: spaf@cs.purdue.EDU

Supersedes: <14693@ector.cs.purdue.edu>

Original-from: chuq@apple.COM (Chuq Von Rospach)

[Most recent change: 19 May 1991 by spaf@cs.purdue.edu (Gene Spafford)]

A Primer on How to Work With the USENET Community
Chuq Von Rospach

*** You now have access to Usenet, a network of thousands of computers. Other documents or your system administrator will provide detailed technical documentation. This message describes the Usenet culture and customs that have developed over time. All new users should read this message to find out how Usenet works. ***

*** (Old users could read it, too, to refresh their memories.) ***

USENET is a large collection of computers that share data with each other. It is the people on these computers that make USENET worth the effort to read and maintain, and for USENET to function properly those people must be able to interact in productive ways. This document is intended as a guide to using the net in ways that will be pleasant and productive for everyone.

This document is not intended to teach you how to use USENET. Instead, it is a guide to using it politely, effectively and efficiently. Communication by computer is new to almost everybody, and there are certain aspects that can make it a frustrating experience until you get used to them. This document should help you avoid the worst traps.

The easiest way to learn how to use USENET is to watch how others use it. Start reading the news and try to figure out what people are doing and why. After a couple of weeks you will start understanding why certain

things are done and what things shouldn't be done. There are documents available describing the technical details of how to use the software. These are different depending on which programs you use to access the news. You can get copies of these from your system administrator. If you do not know who that person is, they can be contacted on most systems by mailing to account "usenet".

Never Forget that the Person on the Other Side is Human

Because your interaction with the network is through a computer it is easy to forget that there are people "out there." Situations arise where emotions erupt into a verbal free-for-all that can lead to hurt feelings.

Please remember that people all over the world are reading your words. Do not attack people if you cannot persuade them with your presentation of the facts. Screaming, cursing, and abusing others only serves to make people think less of you and less willing to help you when you need it.

If you are upset at something or someone, wait until you have had a chance to calm down and think about it. A cup of coffee or a good night's sleep works wonders on your perspective. Hasty words create more problems than they solve. Try not to say anything to others you would not say to them in person in a room full of people.

Don't Blame System Admins for their Users' Behavior

Sometimes, you may find it necessary to write to a system administrator about something concerning his or her site. Maybe it is a case of the software not working, or a control message escaped, or maybe one of the users at that site has done something you feel requires comment. No matter how steamed you may be, be polite to the sysadmin -- he or she may not have any idea of what you are going to say, and may not have any part in the incidents involved. By being civil and temperate, you are more likely to obtain their courteous attention and assistance.

Be Careful What You Say About Others

Please remember -- you read netnews; so do as many as 250,000 other people. This group quite possibly includes your boss, your friend's boss, your girl friend's brother's best friend and one of your father's beer buddies. Information posted on the net can come back to haunt you or the person you are talking about.

Think twice before you post personal information about yourself or others. This applies especially strongly to groups like soc.singles and alt.sex but even postings in groups like talk.politics.misc have included information about the personal life of third parties that could get them into serious trouble if it got into the wrong hands.

Be Brief

Never say in ten words what you can say in fewer. Say it succinctly and it will have a greater impact. Remember that the longer you make your article, the fewer people will bother to read it.

Your Postings Reflect Upon You -- Be Proud of Them

Most people on USENET will know you only by what you say and how well you say it. They may someday be your co-workers or friends. Take some time to make sure each posting is something that will not embarrass you later. Minimize your spelling errors and make sure that the article is easy to read and understand. Writing is an art and to do it well requires practice. Since much of how people judge you on the net is based on your writing, such time is well spent.

Use Descriptive Titles

The subject line of an article is there to enable a person with a limited amount of time to decide whether or not to read your article. Tell people what the article is about before they read it. A title like "Car for Sale" to rec.autos does not help as much as "66 MG Midget for sale: Beaverton OR." Don't expect people to read your article to find out what it is about because many of them won't bother. Some sites truncate the length of the subject line to 40 characters so keep your subjects short and to the point.

Think About Your Audience

When you post an article, think about the people you are trying to reach. Asking UNIX(*) questions on rec.autos will not reach as many of the people you want to reach as if you asked them on comp.unix.questions or comp.unix.internals. Try to get the most appropriate audience for your message, not the widest.

It is considered bad form to post both to misc.misc, soc.net-people, or misc.wanted and to some other newsgroup. If it belongs in that other newsgroup, it does not belong in misc.misc, soc.net-people, or misc.wanted.

If your message is of interest to a limited geographic area (apartments, car sales, meetings, concerts, etc...), restrict the distribution of the message to your local area. Some areas have special newsgroups with geographical limitations, and the recent versions of the news software allow you to limit the distribution of material sent to world-wide newsgroups. Check with your system administrator to see what newsgroups are available and how to use them.

If you want to try a test of something, do not use a world-wide newsgroup! Messages in misc.misc that say "This is a test" are likely to cause large numbers of caustic messages to flow into your mailbox. There are newsgroups that are local to your computer or area that should be used.

Your system administrator can tell you what they are.

Be familiar with the group you are posting to before you post! You shouldn't post to groups you do not read, or post to groups you've only read a few articles from -- you may not be familiar with the on-going conventions and themes of the group. One normally does not join a conversation by just walking up and talking. Instead, you listen first and then join in if you have something pertinent to contribute.

Be Careful with Humor and Sarcasm

Without the voice inflections and body language of personal communications, it is easy for a remark meant to be funny to be misinterpreted. Subtle humor tends to get lost, so take steps to make sure that people realize you are trying to be funny. The net has developed a symbol called the smiley face. It looks like ":-)" and points out sections of articles with humorous intent. No matter how broad the humor or satire, it is safer to remind people that you are being funny.

But also be aware that quite frequently satire is posted without any explicit indications. If an article outrages you strongly, you should ask yourself if it just may have been unmarked satire. Several self-proclaimed connoisseurs refuse to use smiley faces, so take heed or you may make a temporary fool of yourself.

Only Post a Message Once

Avoid posting messages to more than one newsgroup unless you are sure it is appropriate. If you do post to multiple newsgroups, do not post to each group separately. Instead, specify all the groups on a single copy of the message. This reduces network overhead and lets people who subscribe to more than one of those groups see the message once instead of having to wade through each copy.

Please Rotate Messages With Questionable Content

Certain newsgroups (such as rec.humor) have messages in them that may be offensive to some people. To make sure that these messages are not read unless they are explicitly requested, these messages should be encrypted. The standard encryption method is to rotate each letter by thirteen characters so that an "a" becomes an "n". This is known on the network as "rot13" and when you rotate a message the word "rot13" should be in the "Subject:" line. Most of the software used to read usenet articles have some way of encrypting and decrypting messages. Your system administrator can tell you how the software on your system works, or you can use the Unix command "tr [a-z][A-Z] [n-z][a-m][N-Z][A-M]". (Note that some versions of Unix don't require the [] in the "tr" command. In fact, some systems will get upset if you use them in an unquoted manner. The following should work for everyone, but may be shortened on some systems: tr '[a-m][n-z][A-M][N-Z]' '[n-z][a-m][N-Z][A-M]'

Don't forget the single quotes!)

Summarize What You are Following Up

When you are following up someone's article, please summarize the parts of the article to which you are responding. This allows readers to appreciate your comments rather than trying to remember what the original article said. It is also possible for your response to get to some sites before the original article.

Summarization is best done by including appropriate quotes from the original article. Do not include the entire article since it will irritate the people who have already seen it. Even if you are responding to the entire article, summarize only the major points you are discussing.

When Summarizing, Summarize!

When you request information from the network, it is common courtesy to report your findings so that others can benefit as well. The best way of doing this is to take all the responses that you received and edit them into a single article that is posted to the places where you originally posted your question. Take the time to strip headers, combine duplicate information, and write a short summary. Try to credit the information to the people that sent it to you, where possible.

Use Mail, Don't Post a Follow-up

One of the biggest problems we have on the network is that when someone asks a question, many people send out identical answers. When this happens, dozens of identical answers pour through the net. Mail your answer to the person and suggest that they summarize to the network. This way the net will only see a single copy of the answers, no matter how many people answer the question.

If you post a question, please remind people to send you the answers by mail and at least offer to summarize them to the network.

Read All Follow-ups and Don't Repeat What Has Already Been Said

Before you submit a follow-up to a message, read the rest of the messages in the newsgroup to see whether someone has already said what you want to say. If someone has, don't repeat it.

Check the Headers When Following Up

The news software has provisions to specify that follow-ups to an article should go to a specific set of newsgroups -- possibly different from the newsgroups to which the original article was posted. Sometimes the groups chosen for follow-ups are totally inappropriate, especially as a thread of discussion changes with repeated postings. You should carefully check the groups and

distributions given in the header and edit them as appropriate. If you change the groups named in the header, or if you direct follow-ups to a particular group, say so in the body of the message -- not everyone reads the headers of postings.

Be Careful About Copyrights and Licenses

Once something is posted onto the network, it is *probably* in the public domain unless you own the appropriate rights (most notably, if you wrote the thing yourself) and you post it with a valid copyright notice; a court would have to decide the specifics and there are arguments for both sides of the issue. Now that the US has ratified the Berne convention, the issue is even murkier. For all practical purposes, though, assume that you effectively give up the copyright if you don't put in a notice. Of course, the *information* becomes public, so you mustn't post trade secrets that way. When posting material to the network, keep in mind that material that is UNIX-related may be restricted by the license you or your company signed with AT&T and be careful not to violate it. You should also be aware that posting movie reviews, song lyrics, or anything else published under a copyright could cause you, your company, or members of the net community to be held liable for damages, so we highly recommend caution in using this material.

Cite Appropriate References

If you are using facts to support a cause, state where they came from. Don't take someone else's ideas and use them as your own. You don't want someone pretending that your ideas are theirs; show them the same respect.

Mark or Rotate Answers and Spoilers

When you post something (like a movie review that discusses a detail of the plot) which might spoil a surprise for other people, please mark your message with a warning so that they can skip the message. Another alternative would be to use the "rot13" protocol to encrypt the message so it cannot be read accidentally. When you post a message with a spoiler in it make sure the word "spoiler" is part of the "Subject:" line.

Spelling Flames Considered Harmful

Every few months a plague descends on USENET called the spelling flame. It starts out when someone posts an article correcting the spelling or grammar in some article. The immediate result seems to be for everyone on the net to turn into a 6th grade English teacher and pick apart each other's postings for a few weeks. This is not productive and tends to cause people who used to be friends to get angry with each other.

It is important to remember that we all make mistakes, and that there are many users on the net who use English as a second language. There are also a number of people who suffer from dyslexia and who have difficulty noticing their spelling mistakes. If you feel that you must make a comment on the quality of a posting, please do so by mail, not on the network.

Don't Overdo Signatures

Signatures are nice, and many people can have a signature added to their postings automatically by placing it in a file called "\$HOME/.signature". Don't overdo it. Signatures can tell the world something about you, but keep them short. A signature that is longer than the message itself is considered to be in bad taste. The main purpose of a signature is to help people locate you, not to tell your life story. Every signature should include at least your return address relative to a major, known site on the network and a proper domain-format address. Your system administrator can give this to you. Some news posters attempt to enforce a 4 line limit on signature files -- an amount that should be more than sufficient to provide a return address and attribution.

Limit Line Length and Avoid Control Characters

Try to keep your text in a generic format. Many (if not most) of the people reading Usenet do so from 80 column terminals or from workstations with 80 column terminal windows. Try to keep your lines of text to less than 80 characters for optimal readability. If people quote part of your article in a followup, short lines will probably show up better, too.

Also realize that there are many, many different forms of terminals in use. If you enter special control characters in your message, it may result in your message being unreadable on some terminal types; a character sequence that causes reverse video on your screen may result in a keyboard lock and graphics mode on someone else's terminal. You should also try to avoid the use of tabs, too, since they may also be interpreted differently on terminals other than your own.

Summary of Things to Remember

Never forget that the person on the other side is human Don't blame system admins for their users' behavior Be careful what you say about others Be brief
Your postings reflect upon you; be proud of them
Use descriptive titles
Think about your audience
Be careful with humor and sarcasm
Only post a message once

Please rotate material with questionable content
Summarize what you are following up
Use mail, don't post a follow-up
Read all follow-ups and don't repeat what has already been said
Double-check follow-up newsgroups and distributions.
Be careful about copyrights and licenses
Cite appropriate references
When summarizing, summarize
Mark or rotate answers or spoilers
Spelling flames considered harmful
Don't overdo signatures
Limit line length and avoid control characters

(*)UNIX is a registered trademark of AT&T.

This document is in the public domain and may be reproduced or excerpted by anyone wishing to do so.

--

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center, Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398 Internet: spaf@cs.purdue.edu phone: (317) 494-7825

Emily Postnews Answers Your Questions on Netiquette

Path: blister!jtsv16!torsqnt!news-server.csri.toronto.edu!rpi!zaphod.mps.ohio-

state.edu!samsung!news.cs.indiana.edu!purdue!spaf

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers

Subject: Emily Postnews Answers Your Questions on Netiquette

Message-ID: <15400@ector.cs.purdue.edu>

Date: 25 Jul 91 23:15:57 GMT Expires: 23 Oct 91 23:15:57 GMT

Organization: Dept. of Computer Sciences, Purdue Univ.

Lines: 395

Approved: spaf@cs.purdue.EDU

Supersedes: <14696@ector.cs.purdue.edu>

Original-from: brad@looking.on.ca (Brad Templeton)

[Most recent change: 17 Mar 1991 by brad@looking.on.ca (Brad Templeton)]

**NOTE: this is intended to be satirical. If you do not recognize it as such, consult a doctor or professional comedian. The recommendations in this article should recognized for what they are -- admonitions about what NOT to do.

"Dear Emily Postnews"

Emily Postnews, foremost authority on proper net behaviour, gives her advice on how to act on the net.

Dear Miss Postnews: How long should my signature be? -- verbose@noisy

A: Dear Verbose: Please try and make your signature as long as you can. It's much more important than your article, of course, so try and have more lines of signature than actual text.

Try and include a large graphic made of ASCII characters, plus lots of cute quotes and slogans. People will never tire of reading these pearls of wisdom again and again, and you will soon become personally associated with the joy each reader feels at seeing yet another delightful repeat of your signature.

Be sure as well to include a complete map of USENET with each signature, to show how anybody can get mail to you from any site in the world. Be sure to include ARPA gateways as well. Also tell

people on your own site how to mail to you. Give independent addresses for Internet, UUCP, and BITNET, even if they're all the same.

Aside from your reply address, include your full name, company and organization. It's just common courtesy -- after all, in some newsreaders people have to type an *entire* keystroke to go back to the top of your article to see this information in the header.

By all means include your phone number and street address in every single article. People are always responding to usenet articles with phone calls and letters. It would be silly to go to the extra trouble of including this information only in articles that need a response by conventional channels!

Dear Emily: Today I posted an article and forgot to include my signature. What should I do? -- forgetful@myvax

A: Dear Forgetful: Rush to your terminal right away and post an article that says, "Oops, I forgot to post my signature with that last article. Here it is."

Since most people will have forgotten your earlier article, (particularly since it dared to be so boring as to not have a nice, juicy signature) this will remind them of it. Besides, people care much more about the signature anyway. See the previous letter for more important details.

Also, be sure to include your signature TWICE in each article. That way you're sure people will read it.

Dear Ms. Postnews: I couldn't get mail through to somebody on another site. What should I do? -- eager@beaver.dam

A: Dear Eager: No problem, just post your message to a group that a lot of people read. Say, "This is for John Smith. I couldn't get mail through so I'm posting it. All others please ignore."

This way tens of thousands of people will spend a few seconds scanning over and ignoring your article, using up over 16 man-hours their collective time, but you will be saved the terrible trouble of checking through Usenet maps or looking for alternate routes. Just think, if you couldn't distribute your message to 9000 other computers, you might actually have to (gasp) call directory assistance for 60 cents, or even phone the person. This can cost as much as a few DOLLARS (!) for a 5 minute call!

And certainly it's better to spend 10 to 20 dollars of other people's

money distributing the message then for you to have to waste \$9 on an overnight letter, or even 29 cents on a stamp!

Don't forget. The world will end if your message doesn't get through, so post it as many places as you can.

Q: What about a test message?

A: It is important, when testing, to test the entire net. Never test merely a subnet distribution when the whole net can be done. Also put "please ignore" on your test messages, since we all know that everybody always skips a message with a line like that. Don't use a subject like "My sex is female but I demand to be addressed as male." because such articles are read in depth by all USEnauts.

Q: Somebody just posted that Roman Polanski directed Star Wars. What should I do?

A: Post the correct answer at once! We can't have people go on believing that! Very good of you to spot this. You'll probably be the only one to make the correction, so post as soon as you can. No time to lose, so certainly don't wait a day, or check to see if somebody else has made the correction.

And it's not good enough to send the message by mail. Since you're the only one who really knows that it was Francis Coppola, you have to inform the whole net right away!

Q: I read an article that said, "reply by mail, I'll summarize." What should I do?

A: Post your response to the whole net. That request applies only to dumb people who don't have something interesting to say. Your postings are much more worthwhile than other people's, so it would be a waste to reply by mail.

Q: I collected replies to an article I wrote, and now it's time to summarize. What should I do?

A: Simply concatenate all the articles together into a big file and post that. On USENET, this is known as a summary. It lets people read all the replies without annoying newsreaders getting in the way. Do the same when summarizing a vote.

Q: I saw a long article that I wish to rebut carefully, what should I do?

A: Include the entire text with your article, particularly the signature, and include your comments closely packed between the lines. Be sure to post, and not mail, even though your article looks like a reply to the original. Everybody *loves* to read those long point-by-point debates, especially when they evolve into name-calling and lots of "Is too!" -- "Is not!" -- "Is too, twizot!" exchanges.

Be sure to follow-up everything, and never let another person get in the last word on a net debate. Why, if people let other people have the last word, then discussions would actually stop! Remember, other net readers aren't nearly as clever as you, and if somebody posts something wrong, the readers can't possibly realize that on their own without your elucidations. If somebody gets insulting in their net postings, the best response is to get right down to their level and fire a return salvo. When I read one net person make an insulting attack on another, I always immediately take it as gospel unless a rebuttal is posted. It never makes me think less of the insulter, so it's your duty to respond.

Q: How can I choose what groups to post in?

A: Pick as many as you can, so that you get the widest audience. After all, the net exists to give you an audience. Ignore those who suggest you should only use groups where you think the article is highly appropriate. Pick all groups where anybody might even be slightly interested.

Always make sure followups go to all the groups. In the rare event that you post a followup which contains something original, make sure you expand the list of groups. Never include a "Followup-to:" line in the header, since some people might miss part of the valuable discussion in the fringe groups.

Q: How about an example?

A: Ok. Let's say you want to report that Gretzky has been traded from the Oilers to the Kings. Now right away you might think rec.sport.hockey would be enough. WRONG. Many more people might be interested. This is a big trade! Since it's a NEWS article, it belongs in the news.* hierarchy as well. If you are a news admin, or there is one on your machine, try news.admin. If not, use news.misc.

The Oilers are probably interested in geology, so try sci.geo.fluids. He is a big star, so post to sci.astro, and sci.space because they are also interested in stars. And of course comp.dcom.telecom because he was born in the birthplace of the telephone. And because he's Canadian, post to soc.culture.Ontario.southwestern. But that group doesn't exist, so cross-post to news.groups suggesting it should be created. With this many groups of interest, your article will be quite bizarre, so post to talk.bizarre as well. (And post to comp.std.mumps, since they hardly get any articles there, and a "comp" group will propagate your article further.)

You may also find it is more fun to post the article once in each group. If you list all the newsgroups in the same article, some newsreaders will only show the the article to the reader once! Don't tolerate this.

Q: How do I create a newsgroup?

A: The easiest way goes something like "inews -C newgroup", and while that will stir up lots of conversation about your new newsgroup, it might not be enough.

First post a message in news.groups describing the group. This is a "call for discussion." (If you see a call for discussion, immediately post a one line message saying that you like or dislike the group.) When proposing the group, pick a name with a TLA (three-letter acronym) that will be understood only by "in" readers of the group.

After the call for discussion, post the call for flames, followed by a call for arguments about the name and a call for run-on puns. Eventually make a call for "votes." USENET is a democracy, so voters can now all post their votes to ensure they get to all 30,000 machines instead of just the person counting. Every few days post a long summary of all the votes so that people can complain about bad mailers and double votes. It means you'll be more popular and get lots of mail. At the end of 21 days you can post the vote results so that people can argue about all the technical violations of the guidelines you made. Blame them on the moderator-of-the-week for news.announce.newgroups. Then your group might be created.

To liven up discussion, choose a good cross-match for your hierarchy and group. For example, comp.race.formula1 or soc.vlsi.design would be good group names. If you want your group created quickly, include an interesting word like "sex" or "activism." To avoid limiting discussion, make the name as broad as possible, and don't forget that TLA.

If possible, count votes from a leaf site with a once-a-week polled

connection to botswanavax. Schedule the vote during your relay site's head crash if possible.

Under no circumstances use the trial group method, because it eliminates the discussion, flame, pun, voting and guideline-violation accusation phases, thus taking all the fun out of it. To create an ALT group, simply issue the creation command. Then issue an rmgroup and some more newgroup messages to save other netters the trouble of doing that part.

Q: I can't spell worth a dam. I hope your going too tell me what to do?

A: Don't worry about how your articles look. Remember it's the message that counts, not the way it's presented. Ignore the fact that sloppy spelling in a purely written forum sends out the same silent messages that soiled clothing would when addressing an audience.

Q: How should I pick a subject for my articles?

A: Keep it short and meaningless. That way people will be forced to actually read your article to find out what's in it. This means a bigger audience for you, and we all know that's what the net is for. If you do a followup, be sure and keep the same subject, even if it's totally meaningless and not part of the same discussion. If you don't, you won't catch all the people who are looking for stuff on the original topic, and that means less audience for you.

Q: What sort of tone should I take in my article?

A: Be as outrageous as possible. If you don't say outlandish things, and fill your article with libelous insults of net people, you may not stick out enough in the flood of articles to get a response. The more insane your posting looks, the more likely it is that you'll get lots of followups. The net is here, after all, so that you can get lots of attention.

If your article is polite, reasoned and to the point, you may only get mailed replies. Yuck!

Q: The posting software suggested I had too long a signature and too many lines of included text in my article. What's the best course?

A: Such restrictions were put in the software for no reason at all, so don't even try to figure out why they might apply to your article. Turns out most people search the net to find nice articles that consist of the complete text of an earlier article plus a few lines.

In order to help these people, fill your article with dummy original lines to get past the restrictions. Everybody will thank you for it.

For your signature, I know it's tough, but you will have to read it in with the editor. Do this twice to make sure it's firmly in there. By the way, to show your support for the free distribution of information, be sure to include a copyright message forbidding transmission of your article to sites whose USENET politics you don't like.

Also, if you do have a lot of free time and want to trim down the text in your article, be sure to delete some of the attribution lines so that it looks like the original author of -- say -- a plea for world peace actually wrote the followup calling for the nuking of Bermuda.

Q: They just announced on the radio that the United States has invaded Iraq. Should I post?

A: Of course. The net can reach people in as few as 3 to 5 days. It's the perfect way to inform people about such news events long after the broadcast networks have covered them. As you are probably the only person to have heard the news on the radio, be sure to post as soon as you can.

Q: I have this great joke. You see, these three strings walk into a bar...

A: Oh dear. Don't spoil it for me. Submit it to rec.humor, and post it to the moderator of rec.humor.funny at the same time. I'm sure he's never seen that joke.

Q: What computer should I buy? An Atari ST or an Amiga?

A: Cross post that question to the Atari and Amiga groups. It's an interesting and novel question that I am sure they would love to investigate in those groups. There is no need to read the groups in advance or examine the "frequently asked question" lists to see if the topic has already been dealt with. In fact, you don't need to read the group at all, and you can tell people that in your query.

Q: What about other important questions? How should I know when to post?

A: Always post them. It would be a big waste of your time to find a knowledgeable user in one of the groups and ask through private mail if the topic has already come up. Much easier to bother thousands of people with the same question.

Q: What is the measure of a worthwhile group?

A: Why, it's Volume, Volume, Volume. Any group that has lots of noise in it must be good. Remember, the higher the volume of material in a group, the higher percentage of useful, factual and insightful articles you will find. In fact, if a group can't demonstrate a high enough volume, it should be deleted from the net.

Q: Emily, I'm having a serious disagreement with somebody on the net. I tried complaints to his sysadmin, organizing mail campaigns, called for his removal from the net and phoning his employer to get him fired. Everybody laughed at me. What can I do?

A: Go to the daily papers. Most modern reporters are top-notch computer experts who will understand the net, and your problems, perfectly. They will print careful, reasoned stories without any errors at all, and surely represent the situation properly to the public. The public will also all act wisely, as they are also fully cognizant of the subtle nature of net society.

Papers never sensationalize or distort, so be sure to point out things like racism and sexism wherever they might exist. Be sure as well that they understand that all things on the net, particularly insults, are meant literally. Link what transpires on the net to the causes of the Holocaust, if possible. If regular papers won't take the story, go to a tabloid paper -- they are always interested in good stories.

By arranging all this free publicity for the net, you'll become very well known. People on the net will wait in eager anticipation for your every posting, and refer to you constantly. You'll get more mail than you ever dreamed possible -- the ultimate in net success.

Q: What does foobar stand for?

A: It stands for you, dear.

--

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center, Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398

Internet: spaf@cs.purdue.edu phone: (317) 494-7825

Hints on writing style for Usenet

Path: blister!jtsv16!torsqnt!news-server.csri.toronto.edu!rpi!zaphod.mps.ohio-

state.edu!samsung!news.cs.indiana.edu!purdue!spaf

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers

Subject: Hints on writing style for Usenet Message-ID: <15401@ector.cs.purdue.edu>

Date: 25 Jul 91 23:15:58 GMT Expires: 23 Oct 91 23:15:58 GMT

Organization: Dept. of Computer Sciences, Purdue Univ.

Lines: 101

Approved: spaf@cs.purdue.EDU

Supersedes: <14697@ector.cs.purdue.edu>

Original-from: ofut@gatech.edu (A. Jeff Offutt VI)

[Most recent change: 19 Jan 1991 by spaf@cs.purdue.edu (Gene Spafford)]

I would like to take a moment to share some of my knowledge of writing style. If you read the suggestions below, remember: it's easy to agree that they make sense but it's much harder to apply them.

References:

Cunningham and Pearsall, "How to Write For the World of Work" Strunk & White, "Elements of Style"

The above references are both excellent books. Cunningham is a standard in tech writing classes and won an award for the best tech writing book from the Association for Teaching of Technical Writing. I was lucky enough to take a class from him as an undergraduate. Strunk is a standard in college composition classes. Other ideas here come from my own experience on the net and hints from other people.

This is a "long article." The rest of it is simply a list of pointers.

Writing style:

- * Write *below* the readers' reading level. The avg. person in the US reads at a 5th grade level (11 years of age). The avg. professional reads at about the 12th grade level (18 years of age).
- * Keep paragraphs short and sweet. Keep sentences shorter and sweeter. This means "concise," not cryptic.
- * White space is not wasted space -- it greatly improves clarity.

 A blank line only adds a byte to the article length, so don't be stingy if it will help make your meaning clearer.
- * Pick your words carefully. Writing with precision is as important

here as it is in any other kind of discourse. Consider carefully whether what you have written can be misinterpreted, and whether that is something you wish to have happen.

- * People can only grasp about seven things at once. This means ideas in a paragraph, major sections, etc..
- * Avoid abbreviations and acronyms, if possible, and define the ones you use.
- * There are several variations on any one sentence. A passive, questioning or negative sentence takes longer to read.

Net style:

- * Subtlety is not communicated well in written form especially over a computer.
- * The above applies to humor as well. (rec.humor, of course, not included.)
- * When being especially "flame-boyant", I find it helpful to go to the bathroom before actually sending. Then, I often change the tone considerably. :-) Take a break before posting something in anger or that might hurt or anger others.
- * Subject lines should be used very carefully. How much time have you wasted reading articles with a misleading subject line? The "Subject:" header line can be edited in all the various posting programs (as can the "Distribution:", "Newsgroups:" and "Followup-To:" header lines).
- * References need to be made. When you answer mail, you have the original message fresh in your mind. When I receive your answer, I don't.
- * It's *much* easier to read a mixture of upper and lower case letters.
- * Leaving out articles (such as "the," "a," "an," etc.) for "brevity" mangles the meaning of your sentences and takes longer to read. It saves you time at the expense of your reader.
- * Be careful of contextual meanings of words. For instance, I used "articles" just now. In the context of netnews, it has a different meaning than I intended.
- * Make an effort to spell words correctly. Obvious misspellings are jarring and distract the reader. Every news posting program allows you to edit your article before posting, and most systems have some kind of spelling checker program that you can use on your article.

- * Remember this is an international network.
- * Remember your current or future employers may be reading your articles. So might your spouse, neighbors, children, and others who will long-remember your gaffes.

'Nuff said.

These suggestions are all easily supported by arguments and research. There's a lot more to say, but....

- -

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center, Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398 Internet: spaf@cs.purdue.edu phone: (317) 494-7825

How to Create a New Newsgroup

Xref: blister news.announce.newusers:71 news.groups:7462 news.admin:4317

Path: blister!jtsv16!torsqnt!news-

server.csri.toronto.edu!rpi!usc!elroy.jpl.nasa.gov!sdd.hp.com!news.cs.indiana.edu!purd

ue!turbo.bio.net!lear From: lear@turbo.bio.net

Newsgroups: news.announce.newusers,news.groups,news.admin

Subject: How to Create a New Newsgroup Message-ID: <15412@ector.cs.purdue.edu>

Date: 25 Jul 91 23:16:18 GMT Expires: 23 Oct 91 23:16:18 GMT Sender: spaf@cs.purdue.EDU Reply-To: lear@turbo.bio.net

Followup-To: news.announce.newusers

Lines: 149

Approved: spaf@cs.purdue.EDU

Supersedes: <14708@ector.cs.purdue.edu>

Original-from: woods@ncar.ucar.edu (Greg Woods)

[Most recent change: 19 May 1991 by tale@rpi.edu (David C Lawrence)]

GUIDELINES FOR USENET GROUP CREATION

REQUIREMENTS FOR GROUP CREATION:

These are guidelines that have been generally agreed upon across USENET as appropriate for following in the creating of new newsgroups in the "standard" USENET newsgroup hierarchy. They are NOT intended as guidelines for setting USENET policy other than group creations, and they are not intended to apply to "alternate" or local news hierarchies. The part of the namespace affected is comp, news, sci, misc, soc, talk, rec, which are the most widely-distributed areas of the USENET hierarchy.

Any group creation request which follows these guidelines to a successful result should be honored, and any request which fails to follow these procedures or to obtain a successful result from doing so should be dropped, except under extraordinary circumstances. The reason these are called guidelines and not absolute rules is that it is not possible to predict in advance what "extraordinary circumstances" are or how they might arise.

It should be pointed out here that, as always, the decision whether or not to create a newsgroup on a given machine rests with the administrator of that machine. These guidelines are intended merely as an aid in making those decisions.

The Discussion

1) A request for discussion on creation of a new newsgroup should be posted to

news.announce.newgroups, and also to any other groups or mailing lists at all related to the proposed topic if desired. The group is moderated, and the Followup-to: header will be set so that the actual discussion takes place only in news.groups. Users on sites which have difficulty posting to moderated groups may mail submissions intended for news.announce.newgroups to announce-newgroups@rpi.edu.

The article should be cross-posted among the newsgroups, including news.announce.newgroups, rather than posted as separate articles. Note that standard behaviour for posting software is to not present the articles in any groups when cross-posted to a moderated group; the moderator will handle that for you.

- 2) The name and charter of the proposed group and whether it will be moderated or unmoderated (and if the former, who the moderator(s) will be) should be determined during the discussion period. If there is no general agreement on these points among the proponents of a new group at the end of 30 days of discussion, the discussion should be taken offline (into mail instead of news.groups) and the proponents should iron out the details among themselves. Once that is done, a new, more specific proposal may be made, going back to step 1) above.
- 3) Group advocates seeking help in choosing a name to suit the proposed charter, or looking for any other guidance in the creation procedure, can send a message to group-advice@rpi.edu; a few seasoned news administrators are available through this address.

The Vote

- 1) AFTER the discussion period, if it has been determined that a new group is really desired, a name and charter are agreed upon, and it has been determined whether the group will be moderated and if so who will moderate it, a call for votes may be posted to news.announce.newgroups and any other groups or mailing lists that the original request for discussion might have been posted to. There should be minimal delay between the end of the discussion period and the issuing of a call for votes. The call for votes should include clear instructions for how to cast a vote. It must be as clearly explained and as easy to do to cast a vote for creation as against it, and vice versa. It is explicitly permitted to set up two separate addresses to mail yes and no votes to provided that they are on the same machine, to set up an address different than that the article was posted from to mail votes to, or to just accept replies to the call for votes article, as long as it is clearly and explicitly stated in the call for votes article how to cast a vote. If two addresses are used for a vote, the reply address must process and accept both yes and no votes OR reject them both.
- 2) The voting period should last for at least 21 days and no more than 31 days, no matter what the preliminary results of the vote are. The exact date that the voting period will end should be stated in the call for

votes. Only votes that arrive on the vote-taker's machine prior to this date will be counted.

- 3) A couple of repeats of the call for votes may be posted during the vote, provided that they contain similar clear, unbiased instructions for casting a vote as the original, and provided that it is really a repeat of the call for votes on the SAME proposal (see #5 below). Partial vote results should NOT be included; only a statement of the specific new group proposal, that a vote is in progress on it, and how to cast a vote. It is permitted to post a "mass acknowledgement" in which all the names of those from whom votes have been received are posted, as long as no indication is made of which way anybody voted until the voting period is officially over.
- 4) ONLY votes MAILED to the vote-taker will count. Votes posted to the net for any reason (including inability to get mail to the vote-taker) and proxy votes (such as having a mailing list maintainer claim a vote for each member of the list) will not be counted.
- 5) Votes may not be transferred to other, similar proposals. A vote shall count only for the EXACT proposal that it is a response to. In particular, a vote for or against a newsgroup under one name shall NOT be counted as a vote for or against a newsgroup with a different name or charter, a different moderated/unmoderated status or (if moderated) a different moderator or set of moderators.
- 6) Votes MUST be explicit; they should be of the form "I vote for the group foo.bar as proposed" or "I vote against the group foo.bar as proposed". The wording doesn't have to be exact, it just needs to be unambiguous. In particular, statements of the form "I would vote for this group if..." should be considered comments only and not counted as votes.
- 7) A vote should be run only for a single group proposal. Attempts to create multiple groups should be handled by running multiple parallel votes rather than one vote to create all of the groups.

The Result

- 1) At the completion of the voting period, the vote taker must post the vote tally and the E-mail addresses and (if available) names of the votes received to news.announce.newgroups and any other groups or mailing lists to which the original call for votes was posted. The tally should include a statement of which way each voter voted so that the results can be verified.
- 2) AFTER the vote result is posted, there will be a 5 day waiting period, beginning when the voting results actually appear in news.announce.newgroups, during which the net will have a chance to correct any errors in the voter list or the voting procedure.

- 3) AFTER the waiting period, and if there were no serious objections that might invalidate the vote, and if 100 more valid YES/create votes are received than NO/don't create AND at least 2/3 of the total number of valid votes received are in favor of creation, a newgroup control message may be sent out. If the 100 vote margin or 2/3 percentage is not met, the group should not be created.
- 4) The newgroup message will be sent by the news.announce.newgroups moderator at the end of the waiting period of a successful vote. If the new group is moderated, the vote-taker should send a message during the waiting period to Gene Spafford <spaf@cs.purdue.edu> and David C. Lawrence <tale@rpi.edu> with both the moderator's contact address and the group's submission address.
- 5) A proposal which has failed under point (3) above should not again be brought up for discussion until at least six months have passed from the close of the vote. This limitation does not apply to proposals which never went to vote.

USENET Software: History and Sources

Xref: blister news.admin:4314 news.announce.newusers:60 news.software.readers:353

Path: blister!jtsv16!torsqnt!news-server.csri.toronto.edu!rpi!zaphod.mps.ohio-

state.edu!samsung!news.cs.indiana.edu!purdue!spaf

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.admin,news.announce.newusers,news.software.readers

Subject: USENET Software: History and Sources

Message-ID: <15399@ector.cs.purdue.edu>

Date: 25 Jul 91 23:15:56 GMT Expires: 23 Oct 91 23:15:55 GMT

Followup-To: news.admin

Organization: Dept. of Computer Sciences, Purdue Univ.

Lines: 334

Approved: spaf@cs.purdue.EDU

Supersedes: <14695@ector.cs.purdue.edu>

Original from: spaf@purdue (Gene Spafford)

[Most recent change: 6 Jun 1991 by eggert@twinsun.com (Paul Eggert)]

Currently, Usenet readers interact with the news using a number of software packages and programs. This article mentions the important ones and a little of their history, gives pointers where you can look for more information and ends with some special notes about "foreign" and "obsolete" software. At the very end is a list of sites from which current versions of the Usenet software may be obtained.

History

Usenet came into being in late 1979, shortly after the release of V7 Unix with UUCP. Two Duke University grad students in North Carolina, Tom Truscott and Jim Ellis, thought of hooking computers together to exchange information with the Unix community. Steve Bellovin, a grad student at the University of North Carolina, put together the first version of the news software using shell scripts and installed it on the first two sites: "unc" and "duke." At the beginning of 1980 the network consisted of those two sites and "phs" (another machine at Duke), and was described at the January Usenix conference. Steve Bellovin later rewrote the scripts into C programs, but they were never released beyond "unc" and "duke." Shortly thereafter, Steve Daniel did another implementation in C for public distribution. Tom Truscott made further modifications, and this became the "A" news release.

In 1981 at U. C. Berkeley, grad student Mark Horton and high school student Matt Glickman rewrote the news software to add functionality and to cope with the ever increasing volume of news -- "A" News was intended for only a few articles per group per day. This rewrite was the "B" News version. The first public release was version 2.1 in

1982; the 1.* versions were all beta test. As the net grew, the news software was expanded and modified. The last version maintained and released primarily by Mark was 2.10.1.

Rick Adams, at the Center for Seismic Studies, took over coordination of the maintenance and enhancement of the B News software with the 2.10.2 release in 1984. By this time, the increasing volume of news was becoming a concern, and the mechanism for moderated groups was added to the software at 2.10.2. Moderated groups were inspired by ARPA mailing lists and experience with other bulletin board systems. In late 1986, version 2.11 of B News was released, including a number of changes to support a new naming structure for newsgroups, enhanced batching and compression, enhanced ihave/sendme control messages, and other features.

The current release of B News is 2.11, patchlevel 19. Article format is specified in RFC 1036 (see below).

A new version of news, becoming known as C News, has been developed at the University of Toronto by Geoff Collyer and Henry Spencer. This version is a rewrite of the lowest levels of news to increase article processing speed, decrease article expiration processing and improve the reliability of the news system through better locking, etc. The package was released to the net in the autumn of 1987. For more information, see the paper "News Need Not Be Slow," published in The Winter 1987 Usenix Technical Conference proceedings. The current version is labeled 24-Mar-1991.

ANU-NEWS is news package written by Geoff Huston of Australia for VMS systems. ANU-NEWS is complete news system that allows reading, posting, direct replies, moderated newsgroups, etc. in a fashion closely related to regular news. The implementation includes the RFC 1036 news propagation algorithms and integrated use of the NNTP protocols (see below) to support remote news servers, implemented as a VAX/VMS Decnet object. An RFC 977 server implemented as a Decnet object is also included. The ANU-NEWS interface is similar to standard DEC screen oriented systems. The license for the software is free, and there are no restrictions on the re-distribution. For more info, contact gih900@fac.anu.oz.au (Geoff Huston). ANU-NEWS is available for FTP from kuhub.cc.ukans.edu. Contact SLOANE@KUHUB.CC.UKANS.EDU for more info.

A port of C News for the Commodore Amiga under AmigaDOS (NOT Unix), is available. The port was done by Frank J. Edwards <crash@ckctpa.uucp>, and available from Larry Rosenman <ler@lerami.lonestar.org>. Also, Matt Dillon <dillon@overload.berkely.ca.us>, has greatly improved the UUCP clone for AmigaDOS, currently V1.08D, also available for Rosenman. The package also includes a newsreader very loosely like the real rn.

Several popular screen-oriented news reading interfaces have been

developed in the last few years to replace the traditional "readnews" interface. The first of these was "vnews" and it was written by Kenneth Almquist. "vnews" provides a "readnews"-like command interface, but displays articles using direct screen positioning. It appears to have been inspired, to some extent, by the "notes" system (described below). "vnews" is currently distributed with the standard 2.11 news source.

A second, more versatile interface, "rn", was developed by Larry Wall (the author of Perl) and released in 1984. This interface also uses full-screen display with direct positioning, but it includes many other useful features and is very popular with many regular net readers. The interface includes reading, discarding, and/or processing of articles based on user-definable patterns, and the ability of the user to develop customized macros for display and keyboard interaction. "rn" is currently at release 4.3, patchlevel 54, with a major re-release under development by "rn"'s current maintainer, Stan Barber of Academic Consulting Services; release 4.4 is expected in July 1991. "rn" is not provided with the standard news software release, but is very widely available due to its popularity.

A variant of "rn" is "trn" by Wayne Davison. Trn adds the ability to follow "threads of discussions" in newsgroups; its latest version 1.0.3 is based on rn 4.3.54. It uses a Reference-line database to allow the user to take advantage of the "discussion tree" formed by an article and its replies. This results in a true reply-ordered reading of the articles, complete with a small ascii representation of the current article's position in the discussion tree. Trn can be obtained from caesar.cs.montana.edu in the /pub/trn directory, from uunet in the news subdirectory, and from many other archive servers world-wide.

xrn is an X11-based interface to NNTP that was written by Rick Spickelmier and Ellen Sentovich (UC Berkeley). The current version is 6.15. xrn supports many features, including sorting by subject, user-settable key bindings, graceful handling of NNTP server crashes, and many of the features of rn (including KILL files and key bindings similar to rn). xrn is actively supported by the authors with bug fixing and feature addition support from many of the users. xrn can be retrieved from most of the popular FTP sites (gatekeeper.dec.com, uunet.uu.net, expo.lcs.mit.edu) and is on the X11R4 distribution from MIT (in the contrib section).

There are two popular macro packages named "GNUS" and "Gnews" that can be used with the GNU Emacs text editor. These allow reading, replying, and posting interaction with the news from inside the Emacs text editor. Client code exists to get the articles using NNTP rather than from a local disk. Copies can be found on most archive sites that carry the GNU archives.

"nn" is yet another reader interface, developed by Kim F. Storm of Texas Instruments A/S, Denmark, and released in 1989. nn differs from

the traditional readnews and vnews by presenting a menu of article subject and sender-name lines, allowing you to preselect articles to read. nn is also a very fast newsreader, as it keeps a database of article headers on-line. (I.e. it trades space for time. A good rule of thumb is that the nn database size is 5%-10% of your news spool. So up to 110% of your news spool is the amount of space news and the nn database will take.) The current version of nn is 6.4.16. nn can be obtained via anonymous FTP from dkuug.dk, uop.uop.edu, mthvax.cs.miami.edu or various other sites; European sites should request the sources from their nearest backbone site.

"notes" is a software package popular at some sites. It uses a different internal organization of articles, and a different interchange format than that of the standard Usenet software. It was inspired by the notesfiles available in the PLATO system and was developed independently from the Usenet news. Eventually, the "notes" network and Usenet were joined via gateways doing (sometimes imperfect) protocol translation. The interface for "notes" is similar to "rn" but implements different features, many of which are dictated by its internal organization. "notes" was written in 1980-1981 by Ray Essick and Rob Kolstad, (then) grad students at the University of Illinois at Urbana-Champaign. The first public release of "notes" was at the January 1982 Usenix conference. The current release of notes is version 1.7.

In March 1986 a package was released implementing news transmission, posting, and reading using the Network News Transfer Protocol (NNTP) (as specified in RFC 977). This protocol allows hosts to exchange articles via TCP/IP connections rather than using the traditional uucp. It also permits users to read and post news (using a modified version of "rn" or other user agents) from machines which cannot or choose not to install the USENET news software. Reading and posting are done using TCP/IP messages to a server host which does run the USENET software. Sites which have many workstations like the Sun and Apollo products find this a convenient way to allow workstation users to read news without having to store articles on each system. Many of the Usenet hosts that are also on the Internet exchange news articles using NNTP because the load impact of NNTP is much lower than uucp (and NNTP ensures much faster propagation).

NNTP grew out of independent work in 1984-1985 by Brian Kantor at U. C. San Diego and Phil Lapsley at U. C. Berkeley. It is now in release 1.5.11 dated 11 february 1991, with the next planned release at 1.6. NNTP includes support for System V UNIX with Excelan Ethernet cards and DECNET under Ultrix. NNTP was developed at U. C. Berkeley by Phil Lapsley with help from Erik Fair, Steven Grady, and Mike Meyer, among others. The NNTP package is distributed on the 4.3BSD release tape (although that is version 1.2a and out-of-date) and is also available from the various authors, many major hosts, and by anonymous FTP from lib.tmc.edu, mthvax.cs.miami.edu and uunet.uu.net.

Reader NNTP clients for VMS are also available, including VMS/VNEWS (current release 1.3-4.1) and an upcoming reader only version of ANU-NEWS. VMS/VNEWS is available from mcmahon@tgv.com. Although the current release of ANU-NEWS is usable as a reader it can be difficult when used with a UNIX server.

An NNTP newsreader for Macintoshs is available called HyperNews. It is implemented as a HyperCard stack and depends on MacTCP. It is available from many Mac archives, including apple.com and sumex-aim.stanford.edu

There is also an NNTP-based netnews reader for Symbolics Lisp Machines (under Genera 7) available for anonymous FTP from ucbvax.berkeley.edu [128.32.133.1] in pub/nntp-clients/lispm written by Ian Connolly <connolly@coins.cs.umass.edu> and maintained by Richard Welty <welty@lewis.crd.ge.com>. In addition, another NNTP-based news browser is available running under Genera 7 and Genera 8. It provides mouse driven hierarchic browsing of newsgroups and articles, with support for X11 servers on remote machines. It is available for anonymous FTP on flash.bellcore.com [128.96.32.20] in the directory pub/lispm/news-reader/. It is written and maintained by Peter Clitherow <pc@bellcore.com>

A TOPS-20 reader was developed by Dave Edwards of SRI <dle@kl.sri.com>, but current availability is unknown. An NNTP reader suite for PC's running MS-DOS and having Excelan boards is available for ftp from ames.arc.nasa.gov; get the pcrrn files. There are two MS-DOS news readers that can be obtained from bcm.tmc.edu in the "nfs" directory. They both require PC-NFS (from Sun) to work. They will both work under PC/TCP from FTP Software early this year. Source will be provided at that time.

At least one IBM VM/SP (CMS) version of the Usenet software is available. It is known as PSU NetNews, and it is maintained by Linda Littleton (lrl@psuvm.bitnet/psuvm.psu.edu). Version 2.4 of the software is available from LISTSERV@PSUVM. PSU NetNews supports only 3270 terminals, and uses XEDIT as its screen driver. Most major VM sites appear to use this package. NetNews supports locally-stored news, not NNTP reading.

There is NNTP support for PSU NetNews for bulk news receipt: NNTPXFER will poll another site for news, and NNTPRCVR will receive news sent from a Unix NNTPXMIT process. Either program sends the news articles to NetNews for processing. Contact Andy Hooper (hooper@qucdn.bitnet or qucdn.queensu.ca) for more information, or obtain them from listserv@qucdn in PUBLIC FILELIST. These programs are provided with source, and require IBM's FAL TCP/IP and Pascal.

There are at least two NNTP news-readers for VM. One requires IBM's ISPF product. Contact Satish Movva (u37127@uicvm.uic.edu) for

information. The second uses XEDIT as its screen manager. Contact Paul Campbell (pc@mbunix.mitre.org) for information. Both programs require IBM's FAL TCP/IP and Pascal.

Special note on "notes" and pre-2.11 news

Users of these systems may note problems in their interactions with the Usenet. In particular, postings may be made by "notes" users to moderated groups but they will not usually propagate throughout the entire Usenet. The same may happen to users of old B news software.

Users of "notes" or old B news software wishing to post to moderated groups should either mail their submissions to the moderator, as listed in the monthly posting of "List of Moderators" in the group "news.lists", or else they should post from a system running up-to-date B news software (i.e., 2.11). "notes" users may obtain some patches from the comp.sources.unix archives which enable recent versions of "notes" to interact with moderated groups properly.

Users of old B news and "notes" are also not able to take advantage of some other current B news features, such as the "checkgroups" message. "notes" continues to be a "foreign" system, and B news versions before 2.10.2 are considered "obsolete." The various maintainers of the Usenet software have never expressed any commitment to maintain backwards compatibility with "foreign" or obsolete news systems and are unlikely to do so; it is the responsibility of the users to maintain compatibility of such software if they wish to continue to interact with the Usenet.

Software versions & availability

You can obtain the version number of your news software by issuing the "v" command in either "vnews" or "readnews." The "rn" version is obtainable by typing the "v" command to the top level prompt. Type "V" to see the version number of "nn".

Current software is obtainable from almost any major Usenet site. Source to the 'rn' newsreader program is also widely available.

The following sites have sources to the current news software available for anyone needing a copy:

Site	Contact
munnari	kre@munnari.oz.au
osu-cis	postmaster@tut.cis.ohio-state.edu
philabs	usenet@philabs.philips.com
pyramid	usenet@pyramid.com
rutgers	usenet@rutgers.edu
tektronix	news@tektronix.tek.com

watmath usenet@watmath.waterloo.edu

Sources for news 2.11, C News, "rn", and "trn" are also available in the comp.sources.unix archives. European sites should request the sources from their nearest Eunet backbone site.

Standards

News programs communicate with each other according to standard protocols, some of which are described by RFCs. An RFC is a Request For Comment, a de facto standard in the Internet Community. It is a form of published software standard, done through the Network Information Center (NIC) at SRI. Copies of RFCs are often posted to the net and obtainable from archive sites. Current news-related RFCs include the following:

RFC 822 specifies the format of messages; RFC 1036 uses this.

RFC 977 specifies NNTP, the Network News Transfer Protocol.

RFC 1036 specifies the format of Usenet articles.

RFC 1123 amends RFC 822.

RFC 1153 specifies the digest format some moderated groups use.

Newsgroups

The following newsgroups cover issues discussed in this article, and can be consulted for recent developments.

gnu.emacs.gnews News reading under GNU Emacs using Weemba's Gnews.
gnu.emacs.gnus News reading under GNU Emacs using GNUS (in English).
news.software.anu-news VMS B-news software from Australian National Univ.
news.software.b Discussion about B-news-compatible software.
news.software.nn Discussion about the "nn" news reader package.
news.software.notes Notesfile software from the Univ. of Illinois.
news.software.readers General discussion about news reading software.

Acknowledgements

The preparation of this article (and Usenet itself!) was greatly enhanced by the contributions and assistance of the following persons: Steve Bellovin, Ray Essick, Mark Horton, Brian Kantor, Phil Lapsley, Bob Page, Tom Truscott, and Larry Wall. Thanks, folks.

--

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center, Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398 Internet: spaf@cs.purdue.edu phone: (317) 494-7825

Alternative Newsgroup Hierarchies

Xref: blister news.lists:181 news.groups:7459 news.announce.newusers:64

Path: blister!jtsv16!torsqnt!news-server.csri.toronto.edu!rpi!zaphod.mps.ohio-

state.edu!samsung!news.cs.indiana.edu!purdue!spaf

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.lists,news.groups,news.announce.newusers

Subject: Alternative Newsgroup Hierarchies

Summary: describes the following alternate hierarchies: alt, bionet,

bit, biz, clarinet, gnu, ieee, inet/ddn, K12, u3b, vmsnet

Message-ID: <15403@ector.cs.purdue.edu>

Date: 25 Jul 91 23:16:01 GMT Expires: 23 Oct 91 23:16:01 GMT

Followup-To: news.lists

Organization: Dept. of Computer Sciences, Purdue Univ.

Lines: 886

Approved: spaf@cs.purdue.EDU

Supersedes: <14699@ector.cs.purdue.edu>

Original-from: hoptoad!qnu (John Gilmore) and spaf@purdue.edu (Gene Spafford)

[Most recent change: 23 Jul 1991 by spaf@cs.purdue.edu (Gene Spafford)]

Introduction

The Usenet software allows the support and transport of hierarchies of newsgroups not part of the "traditional" Usenet through use of the distribution mechanism. These hierarchies of groups are available to sites wishing to support them and finding a feed. In general, these groups are not carried by the entire network because of their volume, restricted spheres of interest, or a different set of administrative rules and concerns.

In general, it is a bad idea to forward these newsgroups to your neighbors without asking them first; they should only be received at a site by choice. Not only is this generally-accepted net etiquette, it helps to preserve the freedom to do and say as the posters please in these newsgroups, as the only people who get them are those who asked to get them. This freedom is more restricted in the Usenet as a whole, because every mainstream posting and every mainstream newsgroup name must be acceptable to a much wider audience than is present in these hierarchies. Because of the sheer size of the mainstream Usenet, extra-long or controversial postings are more likely to cause problems when posted to the Usenet; however, these alternative hierarchies exist precisely to support those kinds of postings (if germane to the hierarchy).

Usually, there is is no restriction on getting these groups as long as you have the capacity to receive, store, and forward the groups; 2.10.3 or 2.11 news is required to make the distribution mechanism

work properly for these groups. How to join each distribution is described below. Note that the "uunet" service carries all of these hierarchies. Contact uunet!uunet-request for subscription details. Also note -- the lists in this article are totally unofficial and possibly incomplete or inaccurate. I try to keep the lists up-to-date, but make no guarantee that any of the information contained corresponds with the named groups in any significant way. Corrections and comments should be mailed directly to me. Alt "alt" is a collection of newsgroups which are being distributed by a collection of sites that choose to carry them. Many Usenet sites are not interested in these groups. Here is a recent list of the 'alt" newsgroups: Activities for activists. alt.activism alt.activism.d A place to discuss issues in alt.activism. alt.alien.visitors ?? alt.angst Anxiety in the modern world. The aquarium & related as a hobby. alt.aquaria Artistic Community, arts & communication. alt.artcom Discussions of atheism. alt.atheism Lower...to the right...aaaah! alt.backrubs Computer BBS systems & software. alt.bbs alt.bbs.ads Ads for various computer BBS's. alt.bbs.internet BBS systems accessible via the Internet. alt.bbs.lists Postings of regional BBS listings. alt.bbs.lists.d Discussion about regional BBS listings. alt.bbs.waffle The Waffle UUCP BBS. alt.binaries.multimedia Sound, text and graphics data rolled in one. alt.binaries.pictures Additional volume in the form of huge image files. alt.binaries.pictures.d Discussion of postings to alt.binaries.pictures. alt.books.technical Discussion of technical books. Technology and use of the boomerang. alt.boomerang The born-again minister touring US campuses. alt.brother-jed alt.california The state and the state of mind. Callahan's bar for puns and fellowship. alt.callahans Discussions of optical storage media. alt.cd-rom Discussion about restricting speech/press. alt.censorship alt.child-support Raising children in a split family. alt.co-ops Discussion about co-operatives. alt.cobol Use of the programming language COBOL. alt.comp.acad-freedom.news Academic freedom issues related to computers. (Moderated) Alternative subnet discussions and connectivity. alt.config Be paranoid -- they're out to get you. alt.conspiracy

```
alt.cosuard
                Council of Sysops & Users Against Rate Discrimination.
                    Movies with a cult following (e.g., Rocky Horror PS).
alt.cult-movies
alt.cyb-sys
                Cybernetics and Systems.
alt.cyberpunk
                    High-tech low-life.
alt.cyberpunk.chatsubo Literary virtual reality in a cyberpunk hangout.
alt.cyberpunk.movement Cybernizing the Universe.
alt.cyberpunk.tech Cyberspace and Cyberpunk technology.
                    Cyberspace and how it should work.
alt.cyberspace
alt.dcom.telecom
                    Discussion of telecommunications technology.
alt.desert-shield
                    Events in the Middle East, esp. Kuwait.
                    The war against Iraq in Kuwait.
alt.desert-storm
alt.desert-storm.facts For factual information on The Gulf War.
alt.desert-thekurds What's happening to the Kurds in Iraq.
alt.dev.null
                    The ultimate in moderated newsgroups. (Moderated)
alt.dreams
                What do they mean?
                Recreational pharmaceuticals and related flames.
alt.drugs
                Ethnic, exotic, electronic, elaborate, etc. music. *
alt.emusic
                    Exotic music discussions. *
alt.exotic-music
alt.fan.dave_barry Electronic fan club for humorist Dave Barry.
alt.fan.dice-man
                    Fans of Andrew Dice Clay.
                    Fans of funny animals, ala Steve Gallacci's book.
alt.fan.furry
                        Fans of the abrasive radio & TV personality.
alt.fan.howard-stern
alt.fan.mike-jittlov
                        Electronic fan club for animator Mike Jittlov.
alt.fan.monty-python
                        Electronic fan club for those wacky Brits.
alt.fan.rush-limbaugh
                        Fans of the Rush Limbaugh radio talk show.
alt.fan.warlord
                        Mocking net.gods and net.weenies.
alt.fandom.cons
                    Announcements of conventions (SciFi and others).
                    Other topics for fans of various kinds.
alt.fandom.misc
alt.fishing
                Fishing as a hobby and sport.
alt.flame
                Alternative, literate, pithy, succinct screaming.
alt.flame.spelling Fore piple whoe kant spel.
alt.folklore.computers Stories & anecdotes about computers (some true!).
alt.folklore.urban Urban legends, ala Jan Harold Brunvand.
                One place for all forgeries--crossposting encouraged.
alt.forgery
alt.fractals
                    Fractals in math, graphics, and art.
alt.games.gb
                    The Galactic Bloodshed conquest game.
alt.gourmand
                    Recipes & cooking info. (Moderated)
alt.graphics.pixutils
                        Discussion of pixmap utilities.
alt.great-lakes
                    Discussions of the Great Lakes and adjacent places.
alt.hackers
                Descriptions of projects currently under development. (Moderated)
                The horror genre.
alt.horror
                    The semi-legendary Usenet Oracle speaks.
alt.humor.oracle
                    Discussion of hypertext -- uses, transport, etc.
alt.hypertext
alt.individualism
                    Philosophies where individual rights are paramount.
alt.industrial
                        The Industrial Computing Society.
                Internet Relay Chat material.
alt.irc
                    A place for the pre-college set on the net.
alt.kids-talk
                        Assembly languages of various flavours.
alt.lang.asm
alt.lang.cfutures
                    Discussion of the future of the C programming language
alt.lang.intercal
                    A joke language with a real compiler.
                        The ML and SML symbolic languages.
alt.lang.ml
```

```
alt.lang.teco
                    The TECO editor language.
                For discussion about stage magic.
alt.magic
alt.magick
                        For discussion about supernatural arts.
alt.models
                Model building, design, etc.
                        For the serious MS/DOS programmer (no forsale ads).
alt.msdos.programmer
                Issues for and about native Americans.
alt.native
alt.pagan
                Discussions about paganism & religion.
alt.paranormal
                    Phenomena which are not scientifically explicable.
                Parties, celebration and general debauchery.
alt.party
                Discussion of peeves & related.
alt.peeves
                    Geek seeks Dweeb. Object: low-level interfacing.
alt.personals
alt.politics.homosexuality
                               As the name implies
alt.postmodern
                    Postmodernism, semiotics, deconstruction, and the like.
alt.privacy
                        Privacy issues in cyberspace.
                Postings of original writings, fictional & otherwise.
alt.prose
                Discussions about postings in alt.prose.
alt.prose.d
alt.rap
                        For fans of rap music.
                    Fans of The Grateful Dead and Rap. Really.
alt.rap-gdead
                    For people in recovery programs (e.g., AA, ACA, GA).
alt.recovery
alt.religion.computers People who believe computing is "real life."
                    Discussion of nifty places to eat.
alt.restaurants
                    Discussion of the great little state.
alt.rhode_island
                Fans (and otherwise) of Patricia O'Tuama.
alt.rissa
                For the people who like to rmgroup/newgroup things.
alt.rmgroup
alt.rock-n-roll
                    Counterpart to alt.sex and alt.drugs.
alt.rock-n-roll.metal
                        For the headbangers on the net.
alt.rock-n-roll.metal.heavy
                                Non-sissyboy metal bands.
                Discussion about the romantic side of love.
alt.romance
                        Fans of the conservative activist radio announcer.
alt.rush-limbaugh
alt.save.the.earth
                        Environmentalist causes.
alt.sci.astro.fits
                        Technical matters of Flexible Image Transport Systems.
alt.security
                    Security issues on computer systems.
alt.security.index Pointers to good stuff in alt.security. (Moderated)
                Working with needle and thread.
alt.sewing
                Postings of a prurient nature.
alt.sex
alt.sex.bestiality Happiness is a warm puppy.
                    Tie me, whip me, make me read the net!
alt.sex.bondage
                        Jesse Helms would not subscribe to this group.
alt.sex.motss
                    Gigabytes of copyright violations.
alt.sex.pictures
alt.sex.pictures.d Discussing alt.sex.pictures copyright violations.
                Rollerskating and skateboarding.
alt.skate
                    The skinhead culture/anti-culture.
alt.skinheads
                Posting relating to the Church of the Subgenius.
alt.slack
alt.snowmobiles
                        High-horsepower sleds in the powder.
alt.society.ati
                    The Activist Times Digest. (Moderated)
alt.society.cu-digest
                        Postings about the Computer Underground. (Moderated)
                Alternative source code, unmoderated. Caveat Emptor.
alt.sources
                    Technically-oriented Amiga PC sources.
alt.sources.amiga
                    Discussion of posted sources.
alt.sources.d
                   Pointers to source code in alt.sources.*. (Moderated)
alt.sources.index
alt.sources.patches Reposted patches from non-bugs groups.
```

```
alt.sources.wanted Requests for source code.
alt.sport.bungee
                  Like alt.suicide with rubber bands.
alt.sport.paintball The game/art/sport of splatball.
alt.startrek.creative
                       Stories and parodies related to Star Trek.
                   Discussion about stupid newsgroups.
alt.stupidity
alt.suicide.holiday Talk of why suicides increase at holidays.
               Dealing with emotional situations & experiences.
alt.support
alt.surfing
               Riding the ocean waves.
alt.sys.amiga.demos
                       Code and talk to show off the Amiga.
alt.sys.amiga.uucp AmigaUUCP.
alt.sys.amiga.uucp.patches Patches for AmigaUUCP.
alt.sys.intergraph
                       Support for Intergraph machines.
alt.sys.sun
              Technical discussion of Sun Microsystems products.
alt.sys.unisys
                   Burroughs, Sperry, CT, etc. discussions.
alt.tasteless
                   Truly disgusting.
alt.tennis
               The game & sport of tennis.
alt.test
               Alternative subnetwork testing.
                   Discussion of the AT&T Documenter's WorkBench.
alt.text.dwb
               Skateboards and thrashlife.
alt.thrash
alt.toolkits.xview The X windows XView toolkit.
alt.tv.antagonists Fans of the new "The Antagonists" TV show.
alt.tv.muppets
                   Fans of the Muppets, TV shows & movies.
alt.tv.prisoner
                   The Prisoner television series from years ago.
alt.tv.simpsons
                   Don't have a cow, man!
                   Dicussion about the "Tiny Toon Adventures" show.
alt.tv.tiny-toon
alt.tv.twin-peaks
                   Discussion about the popular (and unusual) TV show.
alt.usage.english
                   English grammar, word usages, and related topics.
```

Submissions to the moderated alt.gourmand group should be mailed to recipes@decwrl.dec.com (Brian Reid). alt.society.cu-digest submissions should be mailed to tk0jut2@niu.bitnet or cud@chinacat.unicom.com (Jim Thomas and Gordon Meyer).

* alt.emusic and alt.exotic-music are aliased together at many sites.

You can join the "alt subnet" by finding a site in your area that carries the groups. Either send mail to the administrators of the sites you connect to, or post something to a local "general" or "wanted" newsgroup for your area . If no sites nearby are getting them, you can get them from uunet.

Bionet

There is a newsgroup hierarchy for topics interesting to biologists called "bionet" originating from genbank.bio.net and carried on a growing number of machines including rutgers, phri, mit-eddie, ukma, and all of the machines at UCSD. Contact Eliot Lear <usenet@genbank.bio.net> for more details. The current newsgroup list looks like this:

bionet.agroforestry Discussion of Agroforestry.
bionet.biology.computational Computer and mathematical applications (Moderated)

General BIOSCI discussion. bionet.general bionet.genome.chrom22 Discussion of Chromosome 22. bionet.genome.arabidopsis Information about the Arabidopsis project. bionet.jobs Scientific Job opportunities. Contents of biology journal publications. bionet.journals.contents bionet.molbio.ageing Discussions of cellular and organismal ageing. Computer applications to biological databases. bionet.molbio.bio-matrix bionet.molbio.embldatabank Info about the EMBL Nucleic acid database. How genes and proteins have evolved. bionet.molbio.evolution Info about the GenBank Nucleic acid database. bionet.molbio.genbank bionet.molbio.genbank.updates Hot off the presses! (Moderated) bionet.molbio.gene-linkage Discussions about genetic linkage analysis. bionet.molbio.gene-org How genes are organized on chromosomes. bionet.molbio.genome-program Discussion of Human Genome Project issues. bionet.molbio.methds-reagnts Requests for information and lab reagents. bionet.molbio.proteins Research on proteins and protein databases. bionet.neuroscience Research issues in the neurosciences. Technical discussions about population biology. bionet.population-bio bionet.sci-resources Information about funding agencies, etc. bionet.software Information about software for biology. bionet.users.addresses Who's who in Biology.

Bit

"bit" is a collection of newsgroups which are being distributed by a collection of sites that choose to carry them. The "bit" newsgroups are redistributions of the more popular BitNet LISTSERV mailing lists. Here is a list of the "bit" newsgroups:

bit.admin bit. Newgroups Discussions. bit.general Discussions Relating to BitNet/Usenet. bit.listserv.advise-l User Services List. bit.listserv.aidsnews AIDS/HIV News. bit.listserv.aix-l IBM AIX Discussion List. Discussions on all forms of Music. bit.listserv.allmusic bit.listserv.apple2-l Apple II List. bit.listserv.applicat Applications under BITNET. bit.listserv.asm370 IBM 370 Assembly Programming Discuss. bit.listserv.big-lan Campus-Size LAN Discussion Group. (Moderated) bit.listserv.billing Chargeback of (computer) resources. bit.listserv.biosph-l Biosphere, ecology, Discussion List. bit.listserv.bitnews BITNET News. bit.listserv.candle-l Candle Products Discussion List. bit.listserv.christia Practical Christian Life. bit.listserv.cics-l CICS Discussion List. Discussions on all forms of Cinema. bit.listserv.cinema-l bit.listserv.cmspip-l VM/SP CMS Pipelines Discussion List. bit.listserv.commed Communication education. CUMREC-L Administrative computer use. bit.listserv.cumrec-l CDC Computer Discussion. bit.listserv.cyber-l

bit.listserv.c18-l 18th Century Interdisciplinary Discussion. C/370 Discussion List. bit.listserv.c370-l bit.listserv.dbase-l Discussion on the use of the dBase IV. DB2 Data Base Discussion List. bit.listserv.db2-l bit.listserv.disarm-l Disarmament Discussion List. Domains Discussion Group. bit.listserv.domain-l bit.listserv.earntech EARN Technical Group. Electronic Data Interchange Issues. bit.listserv.edi-l Professionals and Students Discussing Education. bit.listserv.edpolyan bit.listserv.edtech EDTECH - Educational Technology. (Moderated) Electronic Music Discussion List. bit.listserv.emusic-l bit.listserv.envbeh-l Forum on Environment and Human Beh.avior. bit.listserv.erl-l Educational Research List (TCSVM) bit.listserv.esl-l DECUS Education Software Library Discussion L. Discussion of Ethics in Computing. bit.listserv.ethics-l Film making and reviews List. bit.listserv.film-l FRACTAL Discussion List. bit.listserv.frac-l Computer Games List. bit.listserv.games-l GayNet Discussion List. (Moderated) bit.listserv.gaynet bit.listserv.gddm-l The GDDM Discussion List. bit.listserv.geodesic List for the Discussion of Buckminster Fuller. bit.listserv.gguide BITNIC GGUIDE List. Geographic Information Systems Discussion List. bit.listserv.gis-l Gamemasters Interest Group. bit.listserv.gmast-l bit.listserv.govdoc-l Discussion of Government Document Is. bit.listserv.gutnberg GUTNBERG Discussion List. bit.listserv.hellas The Hellenic Discussion List. (Moderated) bit.listserv.history History. bit.listserv.i-amiga Info-Amiga List. bit.listserv.ibm-hesc IBM Higher Education Consortium. IBM Mainframe Discussion List. bit.listserv.ibm-main bit.listserv.ibm-nets BITNIC IBM-NETS List. bit.listserv.ibmtcp-l IBM TCP/IP List. bit.listserv.ibm7171 Protocol Converter List. Instruction Computing Update Newsletter List. bit.listserv.icu-l INFO-GCG: GCG Genetics Software Discussion. bit.listserv.info-gcg Infonets Redistribution. (Moderated) bit.listserv.infonets bit.listserv.ingrafx Information Graphics. bit.listserv.ioob-l Industrial Psychology. ISN Data Switch Technical Discussion Group. bit.listserv.isn bit.listserv.jes2-l JES2 Discussion group. bit.listserv.jnet-l BITNIC JNET-L List. bit.listserv.l-hcap Handicap List. (Moderated) VMCENTER Components Discussion List. bit.listserv.l-vmctr Law School Discussion List. bit.listserv.lawsch-l BITNIC LIAISON. bit.listserv.liaison bit.listserv.license Software Licensing List. bit.listserv.linkfail Link failure announcements. bit.listserv.literary Discussions about Literature. bit.listserv.lstsrv-l Forum on LISTSERV release 1.6. bit.listserv.mail-l BITNIC MAIL-L List.

bit.listserv.mailbook MAIL/MAILBOOK subscription List. MBA Student curriculum Discussion. bit.listserv.mba-l bit.listserv.mbu-l Megabyte University (Computers & Writing). Medical Libraries Discussion List. bit.listserv.medlib-l bit.listserv.mednews MEDNEWS - Health Info-Com Network Newsletter. bit.listserv.netnws-l NETNWS-L Netnews List. bit.listserv.new-list NEW-LIST - New List Announcements. (Moderated) bit.listserv.next-l NeXT Computer List. Node Management. bit.listserv.nodmqt-l NOTIS/DOBIS Discussion group List. bit.listserv.notis-l bit.listserv.novell Novell LAN Interest Group. bit.listserv.omrscan OMR Scanner Discussion. bit.listserv.ozone OZONE Discussion List. bit.listserv.pacs-l Public-Access Computer Systems Forum. IBM 3812/3820 Tips and Problems Discussion List. bit.listserv.page-l bit.listserv.pagemakr PageMaker for Desktop Publishers. bit.listserv.pmdf-l PMDF Distribution List. bit.listserv.policy-l Discussion about BITNET policies. Forum for the Discussion of Politics. bit.listserv.politics POWER-L IBM RS/6000 POWER Family. bit.listserv.power-l bit.listserv.relusr-l Relav Users Forum. REXX Programming Discussion List. bit.listserv.rexxlist Rhetoric, social movements, persuasion. bit.listserv.rhetoric The RSCS modifications List. bit.listserv.rscsmods BITNIC RSCSV2-L List. bit.listserv.rscsv2-l bit.listserv.s-comput SuperComputers List (USCVM). bit.listserv.sas-l SAS(r) Discussion. IBM vs Waterloo SCRIPT Discussion Group. bit.listserv.script-l bit.listserv.scuba-l Scuba diving Discussion List. Student Government Global Mail Network. bit.listserv.sganet bit.listserv.simula The SIMULA Language List. SNA Network Management Discussion. bit.listserv.snamgt-l Social Science Data List. bit.listserv.sos-data SPIRES Conference List. bit.listserv.spires-l bit.listserv.sportpsy Exercise and Sports Psychology. bit.listserv.spssx-l SPSSX(r) Discussion. Forum for SQL/DS and Related Topics. bit.listserv.sqlinfo bit.listserv.stat-l STATISTICAL CONSULTING. BITNIC TECH-L List. bit.listserv.tech-l bit.listserv.test Test Newsgroup. The TeXnical topics List. bit.listserv.tex-l tn3270 protocol Discussion List. bit.listserv.tn3270-l BITNIC TRANS-L List. bit.listserv.trans-l bit.listserv.travel-l Tourism Discussions. University Computing Project Mailing List. bit.listserv.ucp-l bit.listserv.ug-l Usage Guidelines. User Interface for Geographical Info Systems. bit.listserv.uigis-l UREP-L Mailing List. bit.listserv.urep-l bit.listserv.usrdir-l User Directory List. Virus Alert List. (Moderated) bit.listserv.valert-l bit.listserv.vfort-l VS-Fortran Discussion List.

```
bit.listserv.vm-util
                          VM Utilities Discussion List.
bit.listserv.vmslsv-l
                          VAX/VMS LISTSERV Discussion List.
bit.listserv.vmxa-l
                          VM/XA Discussion List.
bit.listserv.vnews-l
                          VNEWS Discussion List.
                          Microsoft Windows Version 3 Forum.
bit.listserv.win3-l
bit.listserv.wp50-l
                          WordPerfect Corporation Products Discussions.
bit.listserv.xcult-l
                          International Intercultural Newsletter.
bit.listserv.xedit-l
                          VM System Editor List.
bit.listserv.xerox-l
                          The Xerox Discussion List.
bit.listserv.xmailer
                          Crosswell Mailer.
bit.listserv.x400-l
                          x.400 Protocol List.
bit.listserv.9370-l
                          IBM 9370 and VM/IS specific topics List.
bit.mailserv.word-mac
                          Word Processing on the Macintosh.
bit.mailserv.word-pc
                          Word Processing on the IBM PC.
Biz
"Biz" is a distribution of newsgroups that are carried and propagated
by sites interested in the world of business products around them -- in
particular, computer products and services. This includes product
announcements, announcements of fixes and enhancements, product
reviews, and postings of demo software. Current biz groups include:
biz.clarinet
                    Announcements about ClariNet.
biz.clarinet.sample Samples of ClariNet newsgroups for the outside world.
biz.comp.hardware Generic commercial hardware postings.
biz.comp.services Generic commercial service postings.
biz.comp.software
                   Generic commercial software postings.
biz.comp.telebit
                    Support of the Telebit modem.
biz.comp.telebit.netblazer The Telebit Netblazer modem.
biz.confia
                Biz Usenet configuration and administration.
biz.control
                Control information and messages.
biz.dec
                DEC equipment & software.
biz.dec.ip
               IP networking on DEC machines.
biz.dec.workstations
                        DEC workstation discussions & info.
biz.jobs.offered
                   Position announcements.
biz.misc
                Miscellaneous postings of a commercial nature.
                    SCO and related product announcements. (Moderated)
biz.sco.announce
                    Q&A, discussions and comments on SCO products.
biz.sco.general
biz.sco.opendesktop ODT environment and applications tech info, g&a.
                Biz newsgroup test messages.
biz.test
                Postings about stolen merchandise.
biz.stolen
Feeds may possibly be obtained from ddsw1.mcs.com, husc6.harvard.edu,
rpi.edu, rutgers.edu, spl1, and telly.on.ca among others.
ClariNet
The ClariNet hierarchy consists of newsgroups gatewayed from
commercial news services and other ''official'' sources. A feed of
```

```
the ClariNet groups requires payment of a fee and execution of a
license. More information may be obtained by sending mail to
"info@clarinet.com".
                ClariNet UPI general news wiregroups.
clari.news
clari.news.hot
                    Temporary groups for hot news stories.
                ClariNet UPI business news wiregroups.
clari.biz
clari.sports
                   ClariNet UPI sports wiregroups.
                ClariNet UPI technology related news wiregroups.
clari.tw
                ClariNet Newsbytes Information service Newsgroups.
clari.nb
clari.net
                ClariNet non-news newsgroups.
                    ClariNet broadcast style news about Canada.
clari.canada
clari.feature
                    Feature columns and products.
clari.feature.dave_barry
                            Columns of humorist Dave Barry. (Moderated)
clari.feature.mike royko
                            Chicago Opinion Columnist Mike Royko. (Moderated)
clari.feature.miss_manners  Judith Martin's Humorous Etiquette Advice. (Moderated)
                       Richard Lederer's "Looking at Language". (Moderated)
clari.feature.lederer
                        Sex Q&A and Advice from Kinsey Institute. (Moderated)
clari.feature.kinsey
clari.canada.newscast
                        Regular newscast for Canadians. (Moderated)
clari.canada.briefs Regular updates of Canadian News in Brief. (Moderated)
clari.canada.briefs.ont News briefs for Ontario and Toronto. (Moderated)
clari.canada.briefs.west News briefs for Alberta, the Prairies & B.C. (Moderated)
                        Short items on Canadian News stories. (Moderated)
clari.canada.general
clari.canada.biz
                   Canadian Business Summaries. (Moderated)
clari.tw.aerospace Aerospace industry and companies. (Moderated)
clari.tw.computers Computer industry, applications and developments. (Moderated)
clari.tw.defense
                   Defense industry issues. (Moderated)
clari.tw.education Stories involving Universities & colleges. (Moderated)
                        Electronics makers and sellers. (Moderated)
clari.tw.electronics
clari.tw.environment
                        Environmental news, hazardous waste, forests. (Moderated)
clari.tw.health
                    Disease, medicine, health care, sick celebs. (Moderated)
                       AIDS stories, research, political issues. (Moderated)
clari.tw.health.aids
clari.tw.misc
                    General technical industry stories. (Moderated)
clari.tw.nuclear
                    Nuclear power & waste. (Moderated)
clari.tw.science
                    General science stories. (Moderated)
                    NASA, Astronomy & spaceflight. (Moderated)
clari.tw.space
                    Regular reports on computer & technology stock prices. (Moderated)
clari.tw.stocks
clari.tw.telecom
                    Phones, Satellites, Media & general Telecom. (Moderated)
clari.biz.commodity Commodity news and price reports. (Moderated)
clari.biz.courts
                    Lawsuits and business related legal matters. (Moderated)
clari.biz.economy
                    Economic news and indicators. (Moderated)
clari.biz.economy.world Economy stories for non-US countries. (Moderated)
                        Business feature stories. (Moderated)
clari.biz.features
clari.biz.finance
                    Finance, currency, Corporate finance. (Moderated)
clari.biz.finance.earnings Earnings & dividend reports. (Moderated)
clari.biz.finance.personal Personal investing & finance. (Moderated)
clari.biz.finance.services Banks and financial industries. (Moderated)
clari.biz.invest
                    News for investors. (Moderated)
clari.biz.labor
                    Strikes, unions and labor relations. (Moderated)
                   General stock market news. (Moderated)
clari.biz.market
                       American Stock Exchange reports & news. (Moderated)
clari.biz.market.amex
```

```
clari.biz.market.dow
                        Dow Jones NYSE reports. (Moderated)
clari.biz.market.ny NYSE reports. (Moderated)
                        NASDAQ reports. (Moderated)
clari.biz.market.otc
clari.biz.market.report General market reports, S&P, etc. (Moderated)
                   Mergers and acquisitions. (Moderated)
clari.biz.mergers
                    Other business news. (Moderated)
clari.biz.misc
clari.biz.products
                  Important new products & services. (Moderated)
clari.biz.top
                    Top business news. (Moderated)
clari.biz.urgent
                    Breaking business news. (Moderated)
                    Weekly summary of Newsbytes computer news. (Moderated)
clari.nb.index
clari.nb.apple
                    Newsbytes Apple/Macintosh news. (Moderated)
clari.nb.business
                    Newsbytes business & industry news. (Moderated)
clari.nb.general
                    Newsbytes general computer news. (Moderated)
                    Newsbytes legal and government computer news. (Moderated)
clari.nb.govt
clari.nb.ibm
                    Newsbytes IBM PC World coverage. (Moderated)
clari.nb.review
                    Newsbytes new product reviews. (Moderated)
clari.nb.telecom
                    Newsbytes telecom & online industry news. (Moderated)
                    Newsbytes new developments & trends. (Moderated)
clari.nb.trends
                    Newsbytes Unix news. (Moderated)
clari.nb.unix
                    Announcements for news admins at ClariNet sites. (Moderated)
clari.net.admin
clari.net.announce Announcements for all ClariNet readers. (Moderated)
clari.net.products New ClariNet products. (Moderated)
clari.net.talk
                    Discussion of ClariNet -- only unmoderated group.
clari.news.almanac Daily almanac - quotes, 'this date in history' etc. (Moderated)
                    Stage, drama & other fine arts. (Moderated)
clari.news.arts
clari.news.aviation Aviation industry and mishaps. (Moderated)
                    Books & publishing. (Moderated)
clari.news.books
                   Regular news summaries. (Moderated)
clari.news.briefs
clari.news.bulletin Major breaking stories of the week. (Moderated)
clari.news.canada
                   News related to Canada. (Moderated)
clari.news.children Stories related to children and parenting. (Moderated)
clari.news.consumer Consumer news, car reviews etc. (Moderated)
                            Demonstrations around the world. (Moderated)
clari.news.demonstration
clari.news.disaster Major problems, accidents & natural disasters. (Moderated)
clari.news.economy General economic news. (Moderated)
clari.news.election News regarding both US and international elections. (Moderated)
                        Entertainment industry news & features. (Moderated)
clari.news.entertain
                   News related to Europe. (Moderated)
clari.news.europe
clari.news.features Unclassified feature stories. (Moderated)
clari.news.fighting Clashes around the world. (Moderated)
                   Ultra-important once-a-year news flashes. (Moderated)
clari.news.flash
clari.news.goodnews Stories of success and survival. (Moderated)
                   General Government related stories. (Moderated)
clari.news.gov
clari.news.gov.agency
                        Government agencies, FBI etc. (Moderated)
clari.news.gov.budget
                        Budgets at all levels. (Moderated)
clari.news.gov.corrupt Government corruption, kickbacks etc. (Moderated)
                                International government-related stories. (Moderated)
clari.news.gov.international
                            Government officials & their problems. (Moderated)
clari.news.gov.officials
clari.news.gov.state
                       State government stories of national importance. (Moderated)
clari.news.gov.taxes
                       Tax laws, trials etc. (Moderated)
clari.news.gov.usa US Federal government news. (High volume). (Moderated)
```

```
clari.news.group
                   Special interest groups not covered in their own group.
(Moderated)
clari.news.group.blacks News of interest to black people. (Moderated)
                       Homosexuality & Gay Rights. (Moderated)
clari.news.group.gays
                       Jews & Jewish interests. (Moderated)
clari.news.group.jews
clari.news.group.women Women's issues and abortion. (Moderated)
clari.news.hot.east_europe News from Eastern Europe. (Moderated)
clari.news.hot.iraq
                       The Gulf Crisis
clari.news.hot.panama
                           Panama and General Noriega. (Moderated)
clari.news.interest
                       Human interest stories. (Moderated)
clari.news.interest.animals Animals in the news. (Moderated)
clari.news.interest.history Human interest stories & history in the making.
clari.news.interest.people Famous people in the news. (Moderated)
                                   Daily "People" column -- tidbits on celebs.
clari.news.interest.people.column
(Moderated)
clari.news.interest.quirks Unusual or funny news stories. (Moderated)
clari.news.issues
                       Stories on major issues not covered in their own group.
(Moderated)
clari.news.issues.civil_rights Freedom, Racism, Civil Rights Issues. (Moderated)
clari.news.issues.conflict Conflict between groups around the world. (Moderated)
clari.news.issues.family
                           Family, Child abuse, etc. (Moderated)
                   Unions, strikes. (Moderated)
clari.news.labor
clari.news.labor.strike Strikes. (Moderated)
                   General group for law related issues. (Moderated)
clari.news.law
clari.news.law.civil
                       Civil trials & litigation. (Moderated)
                       Major crimes. (Moderated)
clari.news.law.crime
                           Sex crimes and trials. (Moderated)
clari.news.law.crime.sex
clari.news.law.crime.trial Trials for criminal actions. (Moderated)
clari.news.law.crime.violent
                               Violent crime & criminals. (Moderated)
clari.news.law.drugs
                       Drug related crimes & drug stories. (Moderated)
clari.news.law.investigation
                               Investigation of crimes. (Moderated)
clari.news.law.police
                       Police & law enforcement. (Moderated)
clari.news.law.prison
                       Prisons, prisoners & escapes. (Moderated)
clari.news.law.profession
                           Lawyers, Judges etc. (Moderated)
clari.news.law.supreme U.S. Supreme court rulings & news. (Moderated)
                       Fashion, leisure etc. (Moderated)
clari.news.lifestyle
clari.news.military Military equipment, people & issues. (Moderated)
                   Reviews, news and stories on movie stars. (Moderated)
clari.news.movies
clari.news.music
                   Reviews and issues concerning music & musicians. (Moderated)
clari.news.politics Politicians & politics. (Moderated)
clari.news.politics.people Politicians & Political Personalities. (Moderated)
clari.news.religion Religion, religious leaders, televangelists. (Moderated)
clari.news.sex
                   Sexual issues, sex-related political stories. (Moderated)
clari.news.terrorism
                       Terrorist actions & related news around the world. (Moderated)
clari.news.top
                   Top US news stories. (Moderated)
clari.news.top.world
                       Top international news stories. (Moderated)
clari.news.trends
                   Surveys and trends. (Moderated)
clari.news.trouble Less major accidents, problems & mishaps. (Moderated)
                   TV schedules, news, reviews & stars. (Moderated)
clari.news.tv
                   Major breaking stories of the day. (Moderated)
clari.news.urgent
```

```
clari.news.weather Weather and temperature reports. (Moderated)
clari.sports.baseball Baseball scores, stories, games, stats. (Moderated)
clari.sports.basketball Basketball coverage. (Moderated)
clari.sports.features Sports feature stories. (Moderated)
clari.sports.football Pro football coverage. (Moderated)
clari.sports.hockey NHL coverage. (Moderated)
clari.sports.misc Other sports, plus general sports news. (Moderated)
clari.sports.motor Racing, Motor Sports. (Moderated)
clari.sports.tennis Tennis news & scores. (Moderated)
clari.sports.top Top sports news. (Moderated)
```

GNU

gnUSENET (gnUSENET is Not USENET) is a set of newsgroups that are gated bi-directionally with the Internet mailing lists of the GNU Project of the Free Software Foundation. GNU (GNU's Not Unix) will be a complete operating system, including application programs, with freely redistributable source code. Please use ONLY gnu.misc.discuss for discussion of topics considered contrary to GNU aims and political philosophy (e.g., porting of GNU code to Apple machines, usefulness of intellectual property laws, etc.).

The GNU mailing lists and newsgroups, like the GNU project itself, exist to promote the freedom to share software. So please don't use these newsgroups (or the other GNU lists) to promote or recommend non-free software. (Using them to post ordering information is the ultimate faux pas.) If there is no free program to do a certain task, then somebody should write one!

Current groups include:

Newsgroup	Description
gnu.announce gnu.bash.bug gnu.chess gnu.emacs.announ gnu.emacs.bug gnu.emacs.gnews gnu.emacs.help gnu.emacs.vm.bug gnu.emacs.vm.bug	Status and announcements from the Project. (Moderated) Bourne Again SHell bug reports and suggested fixes. (Moderated) Announcements about the GNU Chess program. ce Announcements about GNU Emacs. (Moderated) GNU Emacs bug reports and suggested fixes. (Moderated) News reading under GNU Emacs using Weemba's Gnews. News reading under GNU Emacs using GNUS (in English). User queries and answers. s ONLY (please!) C and Lisp source code for GNU Emacs. Bug reports on the Emacs VM mail package. o Information about the Emacs VM mail package.
<pre>gnu.emacs.vms gnu.epoch.misc gnu.g++.announce gnu.g++.bug gnu.g++.help gnu.g++.lib.bug gnu.gcc.announce</pre>	g++ bug reports and suggested fixes. (Moderated) GNU C++ compiler (G++) user queries and answers. g++ library bug reports/suggested fixes. (Moderated)

gnu.gcc.bug GNU C Compiler bug reports/suggested fixes. (Moderated) GNU C Compiler (gcc) user queries and answers. gnu.gcc.help gnu.gdb.bug gcc/g++ DeBugger bugs and suggested fixes. (Moderated) gnu.ghostscript.bug GNU Ghostscript interpreter bugs. (Moderated) gnu.gnusenet.config GNU's Not Usenet administration and configuration. gnu.gnusenet.test GNU's Not Usenet alternative hierarchy testing. gnu.groff.bug Bugs in the GNU roff programs. (Moderated) gnu.misc.discuss Serious discussion about GNU and freed software. gnu.smalltalk.bug Bugs in GNU Smalltalk. (Moderated) Test messages for news propagation. gnu.test GNU utilities bugs (e.g., make, gawk. ls). (Moderated) gnu.utils.bug Use gnu.emacs.help to discuss software on gnu.emacs.sources and to ask for sources. gnu.emacs.sources is archived by many sites and they want sources ONLY! The gnu.*.bug groups are pseudo-moderated (that is, the group is marked moderated so that postings are mailed to prep.ai.mit.edu and then redistributed to the both the mailing list and newsgroup from there). The gnu.*announce groups all fully moderated. If one of your USENET feeds, can't provide you with a feed of the gnUSENET newsgroups, send mail to gnu.gnusenet.config@prep.ai.mit.edu to ask a feed. Questions about GNU can be directed to gnu@prep.ai.mit.edu or: Free Software Foundation 675 Massachusetts Avenue Cambridge, MA 02139 USA +1-617-876-3296 IEEE The IEEE newsgroups concern the IEEE -- the Institute of Electrical and Electronics Engineers. Announcements of general nature to IEEE community. (Moderated) ieee.announce ieee.compmail.announce Announcements pertaining to COMPMAIL. (Moderated) ieee.compmail.bugs COMPMAIL Bug reports - public discussion. ieee.compmail.pc Items of interest to PC-SprintMail users. ieee.fidonet.admin FidoNet IEEE SysOps conference. ieee.fidonet.bbs-help FidoNet IEEE BBS-Help conference. ieee.fidonet.ieee FidoNet General IEEE conference. ieee.general IEEE - General discussion. ieee.mail.help Help with using Mail. ieee.net.tech Network Technical Discussion. ieee.news.admin Newsgroup Administration. ieee.news.announce Announcements pertaining to newsgroup hierarchy. (Moderated) ieee.news.newgroup Newgroup messages. Discussion & tips on PC-NFS. ieee.pcnfs

ieee.pcnfs.lifeline Discussion & tips on using PC-NFS LifeLine Mail.

ieee.rab.announce Regional Activities Board - Announcements. (Moderated)

ieee.rab.general Regional Activities Board - General discussion.

ieee.region1 Region 1 Announcements.

ieee.tab.announce Technical Activities Board - Announcements. (Moderated)

ieee.tab.general Technical Activities Board - General discussion.

ieee.usab.announce USAB - Announcements. (Moderated)

ieee.usab.general USAB - General discussion.

We are willing to distribute these newsgroups via NNTP to any site that desires to carry them. If you would like a feed of these newsgroups, have the newsadmin for your site contact 'usenet@ieee.org' for a feed.

Inet/DDN

Another alternative hierarchy is the "inet/ddn" distribution. This consists of many newsgroups bearing names similar to traditional Usenet groups and corresponding to Internet discussion lists. These groups are circulated using the NNTP transport mechanism amongst sites on the Internet in an attempt to reduce the number of copies of these groups flowing through the mail (some sites get these groups via UUCP and other tranpost mechanisms, but the volume can be substantial and load may be significant without a high-speed link). Further details may be obtained by writing to Erik Fair (fair@ucbarpa.berkeley.edu).

Current inet groups are:

```
comp.ai.edu
                Applications of Artificial Intelligence to Education.
comp.ai.vision
                    Artificial Intelligence Vision Research. (Moderated)
comp.dcom.lans.hyperchannel Hyperchannel networks within an IP network.
comp.editors
                    Topics related to computerized text editing.
comp.edu.composition
                        Writing instruction in computer-based classrooms.
comp.org.eff.news
                    News from the Electronic Frontiers Foundation. (Moderated)
comp.org.eff.talk
                    Discussion of EFF goals, strategies, etc.
comp.lang.asm370
                    Programming in IBM System/370 Assembly Language.
comp.lang.clu
                    The CLU language & related topics.
comp.lang.forth.mac The CSI MacForth programming environment.
                    Topics related to the ICON programming language.
comp.lang.icon
comp.lang.idl
                    IDL (Interface Description Language) related topics.
                        The Franz Lisp programming language.
comp.lang.lisp.franz
comp.lang.lisp.x
                    The XLISP language system.
                    The REXX command language.
comp.lang.rexx
comp.lang.scheme.c The Scheme language environment.
comp.lang.visual
                    Visual programming languages.
comp.lsi.cad
                    Electrical Computer Aided Design.
comp.mail.multi-media
                        Multimedia Mail.
                Applications of computers in music research.
comp.music
                Topics related to Data General's AOS/VS.
comp.os.aos
                        Discussion of Amethyst, CP/M-80 software package.
comp.os.cpm.amethyst
                    Topics related to the PDP-11 RSTS/E operating system.
comp.os.rsts
```

```
comp.os.v The V distributed operating system from Stanford.
comp.periphs.printers Information on printers.
comp.protocols.iso.dev-environ The ISO Development Environment.
comp.protocols.iso.x400 X400 mail protocol discussions. (Moderated)
comp.protocols.iso.x400.gateway X400 mail gateway discussions. (Moderated)
comp.protocols.pcnet
                        Topics related to PCNET (a personal computer network).
comp.protocols.snmp The Simple Network Management Protocol.
comp.protocols.tcp-ip.domains Topics related to Domain Style names.
comp.protocols.time.ntp The network time protocol.
comp.security.announce Announcements from the CERT about security. (Moderated)
comp.soft-sys.andrew
                        The Andrew system from CMU.
comp.std.announce
                   Announcements about standards activities. (Moderated)
comp.sys.cdc
                    Control Data Corporation Computers (e.g., Cybers).
comp.sys.handhelds Handheld computers and programmable calculators.
comp.sys.intel.ipsc310 Anything related to Xenix on an Intel 310.
comp.sys.northstar Northstar microcomputer users.
comp.sys.super
                    Supercomputers.
comp.sys.ti.explorer
                        The Texas Instruments Explorer.
                   Heath terminals and related Zenith products.
comp.sys.zenith
comp.terminals.bitgraph The BB&N BitGraph Terminal.
comp.terminals.tty5620 AT&T Dot Mapped Display Terminals (5620 and BLIT).
                    ISO 8879 SGML, structured documents, markup languages.
comp.text.sqml
comp.theory
               Theoretical Computer Science.
comp.theory.cell-automata
                           Discussion of all aspects of cellular automata.
comp.theory.dynamic-sys Ergodic Theory and Dynamical Systems.
comp.theory.self-org-sys
                           Topics related to self-organization.
                   Cray computers and their operating systems.
comp.unix.cray
comp.windows.x.announce X Consortium announcements.
comp.windows.x.motif
                        The Motif GUI for the X Window System.
news.software.nntp The Network News Transfer Protocol.
rec.games.vectrex
                   The Vectrex game system.
                    A Science Fiction "fanzine." (Moderated)
rec.mag.fsfnet
sci.bio.technology Any topic relating to biotechnology.
                        Numerical Analysis.
sci.math.num-analysis
sci.philosophy.meta Discussions within the scope of "MetaPhilosophy."
soc.culture.esperanto
                       The neutral international language Esperanto.
                   The DDN Management Bulletin from NIC.DDN.MIL (Moderated)
ddn.mgt-bulletin
ddn.newsletter
                   The DDN Newsletter from NIC.DDN.MIL (Moderated)
K12
K12Net is a loosely-organized, totally decentralized network of school
based/oriented "electronic bulletin board systems" (BBS's) throughout
North America, Australia, and Europe that share curriculum-related
message bases or "echo forums," classroom-to-classroom projects, and
educational files -- making them available to students and educators
at no cost and usually on a local phone call.
```

K12Net was born in the summer of 1990 as a collection of FidoNet echomail conferences. It was created by teachers so that they and

their students can use networking technology to advance education in the 'K12' arena. On FidoNet, it spans North America, goes through Europe to the Soviet Union, wanders around Australia, etc.

As an experiment, m2xenix.psg.com is gating the echos (from puddle.fidonet.org aka 1:105/42) into Usenet newsgroups and feeding them to uunet.uu.net where they are available to all and sundry. The initial name mapping is as follows:

k12.chat.elementary Informal discussion among elementary students, grades K-5.

k12.chat.juniork12.chat.seniork12.chat.seniorInformal discussion among high school students.k12.chat.teacherInformal discussion among teachers in grades K-12.

k12.ed.art Art curriculum in K-12 education.

k12.ed.business Business education curriculum in grades K-12. k12.ed.comp.literacy Teaching computer literacy in grades K-12.

k12.ed.health-pe Health and Physical Education curriculum in grades K-12.

k12.ed.life-skills Home Economics and Career education in grades K-12.

k12.ed.math Mathematics curriculum in K-12 education.

k12.ed.music Music and Performing Arts curriculum in K-12 education.

k12.ed.science Science curriculum in K-12 education.

k12.ed.soc-studies Social Studies and History curriculum in K-12 education. k12.ed.special K-12 education for students w/ handicaps or special needs.

k12.ed.tag K-12 education for talented and gifted students.

k12.ed.tech Industrial Arts and vocational education in grades K-12.

k12.lang.art Language Arts curriculum in K-12 education.

k12.lang.deutsch-eng Bilingual German/English practice with native speakers.

k12.lang.esp-eng Bilingual Spanish/English practice with native speakers.
k12.lang.francais Bilingual French/English practice with native speakers.

k12.lang.russian Bilingual Russian/English practice with native speakers.

The k12.chat.* groups contain inter-student chat, and tend to be, shall we say, uninteresting to many adults, and a bit voluminous.

For further information, contact Janet Murray, janet.murray@f23.n105.z1.fidonet.org.

U3B

Groups dealing with AT&T 3B{2,5,15,20,4000} computers -- everything except for the UNIX PC/3B1. Both uunet and ames carry these groups.

u3b.config
u3b.misc
u3b.misc
u3b.sources
u3b.tech
u3b.test
3B Distribution configuration.
3B Miscellaneous Discussions.
3B Sources for AT&T 3B systems.
3B Technical Discussions.
3B Distribution Testing.

VMSnet

This hierarchy is for topics of interest to VAX/VMS users. They are carried

by most major usenet news sites, including uunet. The vmsnet groups are carried by roughly one third of the sites on usenet. To find a feed, contact the system managers of news sites near you, and/or post to a local or regional newsgroup and ask if anyone in the area is carrying the VMSnet newsgroups.

If you have tried these alternatives and still can not find a site in your local area that carries the VMSnet groups, you can send mail to Terry Poot <tp@mccall.com>, who will attempt to assist you in finding a feed for the groups. Alternatively, you can send mail to the VMSnet mailing list <vmsnet@drycas.club.cc.cmu.edu>, which is also gatewayed to the vmsnet.uucp newsgroup and ask for help. In either case, be sure to state where you are geographically, and what your constraints are. For instance, if you can only place local phone calls, be sure to say just what areas are a local call for you. Also describe your network connectivity (what networks you are on, your uucp neighbors, etc.).

Here is a current list of VMSnet newsgroups:

```
vmsnet.admin
                    Administration of the VMSnet newsgroups.
                    General announcements of interest to all. (Moderated)
vmsnet.announce
                            Orientation info for new users. (Moderated)
vmsnet.announce.newusers
vmsnet.mail.misc
                    Other electronic mail software.
                    PMDF email system, gatewayed to ipmdf mailing list.
vmsnet.mail.pmdf
vmsnet.mail.mx MX email system from RPI, gatewayed to MX mailing list.
                General VMS topics not covered elsewhere.
vmsnet.misc
vmsnet.networks.desktop.misc
                               Other desktop integration software.
vmsnet.networks.desktop.pathworks
                                    DEC Pathworks desktop integration software.
vmsnet.networks.tcp-ip.cmu-tek CMU-TEK TCP/IP package, gatewayed to cmu-tek-
tcp+@andrew.cmu.edu.
vmsnet.networks.tcp-ip.misc Other TCP/IP solutions for VMS.
vmsnet.networks.tcp-ip.multinet TGV's Multinet TCP/IP, gatewayed to info-multinet.
                    Source code postings ONLY. (Moderated)
vmsnet.sources
                    Discussion about or requests for sources.
vmsnet.sources.d
                        Recreational software postings.
vmsnet.sources.games
vmsnet.sysmgt
                    VMS system management.
vmsnet.test
                Test messages.
                        TPU language and applications, gatewayed to info-tpu.
vmsnet.tpu
                DECUS uucp software, gatewayed to vmsnet mailing list.
vmsnet.uucp
```

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center, Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398 Internet: spaf@cs.purdue.edu phone: (317) 494-7825

List of Active Newsgroups

Xref: blister news.lists:180 news.groups:7458 news.announce.newusers:63 Path: blister!jtsv16!torsqnt!news-server.csri.toronto.edu!rpi!zaphod.mps.ohiostate.edu!samsung!news.cs.indiana.edu!purdue!spaf From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.lists,news.groups,news.announce.newusers Subject: List of Active Newsgroups Message-ID: <15402@ector.cs.purdue.edu> Date: 25 Jul 91 23:15:59 GMT Expires: 23 Oct 91 23:15:59 GMT Followup-To: news.lists Organization: Dept. of Computer Sciences, Purdue Univ. Lines: 740 Approved: spaf@cs.purdue.EDU Supersedes: <14698@ector.cs.purdue.edu> [Most recent change: 25 Jul 1991 by spaf@cs.purdue.edu (Gene Spafford)] The following is a list of currently active USENET newsgroups as of 25 Jul 1991. The groups distributed worldwide are divided into seven broad classifications: "news", "soc", "talk", "misc", "sci", "comp" and "rec". Each of these classifications is organized into groups and subgroups according to topic. "comp" Topics of interest to both computer professionals and hobbyists, including topics in computer science, software source, and information on hardware and software systems. Discussions marked by special and usually practical knowledge, relating to research in or application of the established sciences. "misc" Groups addressing themes not easily classified under any of the other headings or which incorporate themes from multiple categories. "soc" Groups primarily addressing social issues and socializing. "talk" Groups largely debate-oriented and tending to feature long discussions without resolution and without appreciable amounts of generally useful information. "news" Groups concerned with the news network and software themselves. "rec" Groups oriented towards hobbies and recreational activities. These "world" newsgroups are (usually) circulated around the entire

USENET -- this implies world-wide distribution. Not all groups

actually enjoy such wide distribution, however. The European Usenet and Eunet sites take only a selected subset of the more "technical" groups, and controversial "noise" groups are often not carried by many sites in the US and Canada (these groups are often under the "talk" and "soc" classifications). Many sites do not carry some or all of the comp.binaries groups.

There are groups in other subcategories, but they are local: to institutions, to geographic regions, etc. and they are not listed here. Note that these distribution categories can be used to restrict the propagation of news articles. Currently, distributions include:

world
worldwide distribution (default)

att limited to AT&T can limited to Canada

eunet limited to European sites
na limited to North America
usa limited to the United States

There may be other regional and local distribution categories available at your site. Most US states have distribution categories named after the two letter abbreviation for that state or category (e.g., "ga" for Georgia, "nj" for New Jersey). Please use an appropriate distribution category if your article is not likely to be of interest to USENET readers worldwide. A companion article to this lists all of the regional distributions and their newsgroups.

Some groups are moderated or are monitored mailing lists. They can only be posted to by mailing submissions to the coordinator (provided in a companion posting). Some selected sites provide automatic remailing in support of 2.11 news -- posting to one of these groups automatically mails the article for the poster. Some of the moderated groups are gatewayed to USENET from the Internet and appear as newsgroups to facilitate distribution and posting from the Usenet. Other of the "world" groups are bidirectionally gatewayed with Internet mailing lists; items submitted from the Internet side to the digest are split up and submitted to the USENET group, while articles submitted on the USENET side are bundled up and submitted to the mailing list. A complete list of moderated newsgroups, submission addresses and moderators is given in a companion posting.

The following "world" groups have been gatewayed with the listed Internet lists. Some of them may not still be gatewayed due to broken software and/or gateways; such groups are marked with an asterisk ("*") in the list below. Please contact me if you should know of their current status. Also note that the group "comp.lang.forth" is gatewayed with the Bitnet discussion list "umforth@weizmann.bitnet", and rec.railroad is run from "railroad@queens.bitnet".

Some of these lists are gated one-way into Usenet groups; those groups have been marked with a ">" symbol in the list below.

If you are reading this article from a site not on the Usenet, you may subscribe to Internet lists by writing to the request address.

You form such an address by putting "-request" before the "@" symbol, as in "unix-emacs-request@bbn.com". This gets your message directly to the list maintainer instead of broadcasting it to all the readers of the list.

Also note that moderators of Usenet groups may not be in charge of the corresponding mailing list or gateway. For example, the moderator of comp.sources.unix does not have anything to do with the unix-sources mailing list; matters concerning the mailing list should be addressed to unix-sources-request@brl.mil

```
Usenet Group
                    Internet list
_____
                    info-modems@wsmr-simtel20.army.mil
comp.dcom.modems
comp.dcom.telecom
                    telecom@eecs.nwu.edu
comp.emacs
                unix-emacs@bbn.com
>comp.emacs
                 info-gnu-emacs@prep.ai.mit.edu
                 help-qnu-emacs@prep.ai.mit.edu
>comp.emacs
                    info-ada@ajpo.sei.cmu.edu
*comp.lang.ada
comp.lang.c
                info-c@brl.mil
                     info-q++@prep.ai.mit.edu
>comp.lang.c++
                     help-g++@prep.ai.mit.edu
>comp.lang.c++
comp.lang.modula2
                    info-m2@ucf1vm.bitnet
*comp.lang.pascal
                    info-pascal@brl.mil
                    prolog@score.stanford.edu
*comp.lang.prolog
comp.os.cpm
                info-cpm@wsmr-simtel20.army.mil
                    info-minix@udel.edu
comp.os.minix
                info-vax@sri.com
comp.os.vms
comp.protocols.kerberos kerberos@athena.mit.edu
comp.protocols.tcp-ip
                        tcp-ip@nic.ddn.mil
comp.sources.misc
                    unix-sources@brl.mil
                    unix-sources@brl.mil
comp.sources.unix
                    apollo@umix.cc.umich.edu
comp.sys.apollo
comp.sys.apple2
                    info-apple@apple.com
comp.sys.atari.8bit info-atari8@score.stanford.edu
comp.sys.atari.st
                    info-atari16@score.stanford.edu
                    info-micro@wsmr-simtel20.army.mil
comp.sys.misc
comp.sys.sun
                    sun-spots@rice.edu
                    info-tahoe@csd1.milw.wisc.edu
comp.sys.tahoe
                    info-1100@tut.cis.ohio-state.edu
comp.sys.xerox
                    info-terms@mc.lcs.mit.edu
*comp.terminals
>comp.text.tex
                     texhax@cs.washington.edu
comp.unix.questions info-unix@brl.mil
comp.unix.internals unix-wizards@brl.mil
comp.windows.x
                    xpert@expo.lcs.mit.edu
rec.arts.sf-lovers
                   sf-lovers@rutgers.edu
rec.food.recipes
                    recipes@mthvax.cs.miami.edu
   rec.radio.amateur.misc info-hams@ucsd.edu
                                packet-radio@ucsd.edu
   rec.radio.amateur.packet
rec.radio.amateur.policy ham-policy@ucsd.edu
                       swl-l@cuvma.columbia.edu
rec.radio.shortwave
```

```
rec.music.funky
                        funky-music@hyper.lap.upenn.edu
    rec.music.gdead
                        dead-flames@virginia.edu
    rec.music.synth
                        synth-l@auvm.auvm.edu
        rec.video
                                videotech@wsmr-simtel20.army.mil
    *sci.astro
                    sky-fans@xx.lcs.mit.edu
    sci.physics
                    physics@unix.sri.com
    sci.physics.fusion fusion@zorch.sf-bay.org
    sci.space
                    space@andrew.cmu.edu
                    roots-l@vm1.nodak.edu
    soc.roots
Please notify me of any errors or changes to the information in this article.
Gene Spafford
spaf@purdue.EDU
               Description
                   Discussions of site administration policies.
comp.admin.policy
               Artificial intelligence discussions.
comp.ai.neural-nets All aspects of neural networks.
comp.ai.nlang-know-rep Natural Language and Knowledge Representation. (Moderated)
comp.ai.philosophy Philosophical aspects of Artificial Intelligence.
comp.ai.shells
                    Artificial intelligence applied to shells.
comp.arch
                Computer architecture.
                    Descriptions of public access archives. (Moderated)
comp.archives
comp.archives.admin Issues relating to computer archive administration.
comp.benchmarks
                    Discussion of benchmarking techniques and results.
comp.binaries.acorn Binary-only postings for Acorn machines. (Moderated)
comp.binaries.amiga Encoded public domain programs in binary. (Moderated)
                        Binary-only postings for the Apple II computer.
comp.binaries.apple2
comp.binaries.atari.st Binary-only postings for the Atari ST. (Moderated)
comp.binaries.ibm.pc
                        Binary-only postings for IBM PC/MS-DOS. (Moderated)
comp.binaries.ibm.pc.archives
                                Annoucements related to IBM PC archive sites.
comp.binaries.ibm.pc.d Discussions about IBM/PC binary postings.
comp.binaries.ibm.pc.wanted Requests for IBM PC and compatible programs.
comp.binaries.mac
                    Encoded Macintosh programs in binary. (Moderated)
                    Binaries for use under the OS/2 ABI. (Moderated)
comp.binaries.os2
comp.bugs.2bsd
                    Reports of UNIX* version 2BSD related bugs.
comp.bugs.4bsd
                    Reports of UNIX version 4BSD related bugs.
comp.bugs.4bsd.ucb-fixes
                            Bug reports/fixes for BSD Unix. (Moderated)
comp.bugs.misc
                    General UNIX bug reports and fixes (incl V7, uucp)
comp.bugs.sys5
                    Reports of USG (System III, V, etc.) bugs.
comp.cog-eng
                    Cognitive engineering.
                    Compiler construction, theory, etc. (Moderated)
comp.compilers
                    Data compression algorithms and theory.
comp.compression
                    Database and data management issues and theory.
comp.databases
comp.dcom.fax
                    Fax hardware, software, and protocols.
                    Local area network hardware and software.
comp.dcom.lans
comp.dcom.modems
                    Data communications hardware and software.
comp.dcom.sys.cisco Info on Cisco routers and bridges.
comp.dcom.telecom
                    Telecommunications digest. (Moderated)
```

```
Archived public-domain documentation. (Moderated)
comp.doc
comp.doc.techreports
                        Lists of technical reports. (Moderated)
comp.dsp
                Digital Signal Processing using computers.
                Computer science education.
comp.edu
comp.emacs
                EMACS editors of different flavors.
                Typefonts -- design, conversion, use, etc.
comp.fonts
                    Computer graphics, art, animation, image processing.
comp.graphics
comp.graphics.research Highly technical computer graphics discussion. (Moderated)
comp.graphics.visualization Info on scientific visualization.
comp.groupware
                    Hardware & software for facilitating group interaction.
comp.human-factors
                   Issues related to human-computer interaction (HCI).
comp.infosystems
                    Any discussion about information systems.
comp.ivideodisc
                    Interactive videodiscs -- uses, potential, etc.
comp.lang.ada
                    Discussion about Ada*.
comp.lang.apl
                    Discussion about APL.
comp.lang.c
                Discussion about C.
comp.lang.c++
                    The object-oriented C++ language.
                    Common Lisp Object System discussions.
comp.lang.clos
comp.lang.eiffel
                    The object-oriented Eiffel language.
                    Discussion about Forth.
comp.lang.forth
comp.lang.fortran
                    Discussion about FORTRAN.
comp.lang.functional
                        Discussion about functional languages.
comp.lang.idl-pvwave
                        IDL and PV-Wave language discussions.
comp.lang.lisp
                    Discussion about LISP.
comp.lang.lisp.mcl
                    Discussing Apple's Macintosh Common Lisp.
comp.lang.misc
                    Different computer languages not specifically listed.
comp.lang.modula2
                    Discussion about Modula-2.
comp.lang.modula3
                    Discussion about the Modula-3 language.
comp.lang.objective-c
                        The Objective-C language and environment.
comp.lang.pascal
                    Discussion about Pascal.
comp.lang.perl
                    Discussion of Larry Wall's Perl system.
                        The PostScript Page Description Language.
comp.lang.postscript
comp.lang.prolog
                    Discussion about PROLOG.
comp.lang.scheme
                    The Scheme Programming language.
comp.lang.sigplan
                    Info & announcements from ACM SIGPLAN. (Moderated)
comp.lang.smalltalk Discussion about Smalltalk 80.
                    VHSIC Hardware Description Language, IEEE 1076/87.
comp.lang.vhdl
comp.laser-printers Laser printers, hardware & software. (Moderated)
                Large scale integrated circuits.
comp.lsi
comp.lsi.testing
                    Testing of electronic circuits.
                    Discussion and fixes for ELM mail system.
comp.mail.elm
comp.mail.headers
                    Gatewayed from the Internet header-people list.
comp.mail.maps
                    Various maps, including UUCP maps. (Moderated)
comp.mail.mh
                    The UCI version of the Rand Message Handling system.
comp.mail.misc
                    General discussions about computer mail.
comp.mail.mush
                    The Mail User's Shell (MUSH).
comp.mail.sendmail
                    Configuring and using the BSD sendmail agent.
comp.mail.uucp
                    Mail in the uucp network environment.
comp.misc
                General topics about computers not covered elsewhere.
comp.multimedia
                    Interactive multimedia technologies of all kinds.
                    Announcements of new products of interest. (Moderated)
comp.newprod
```

```
comp.object
               Object-oriented programming and languages.
comp.org.acm
                    Topics about the Association for Computing Machinery.
comp.org.decus
                    Digital Equipment Computer Users' Society newsgroup.
                    FidoNews digest, official news of FidoNet Assoc. (Moderated)
comp.org.fidonet
comp.org.ieee
                   Issues and announcements about the IEEE & its members.
                    Talk about/for the The Sun User's Group.
comp.org.sug
comp.org.usenix
                   USENIX Association events and announcements.
comp.org.usenix.roomshare
                           Finding lodging during Usenix conferences.
                    Discussion and support of the Coherent operating system.
comp.os.coherent
                Discussion about the CP/M operating system.
comp.os.cpm
comp.os.mach
                   The MACH OS from CMU & other places.
comp.os.minix
                   Discussion of Tanenbaum's MINIX system.
comp.os.misc
                    General OS-oriented discussion not carried elsewhere.
comp.os.msdos.apps Discussion of applications that run under MS-DOS.
comp.os.msdos.desqview QuarterDeck's Desqview and related products.
comp.os.msdos.misc Miscellaneous topics about MS-DOS machines.
comp.os.msdos.programmer
                            Programming MS-DOS machines.
comp.os.os2.apps
                   Discussions of applications under OS/2.
comp.os.os2.misc
                    Miscellaneous topics about the OS/2 system.
comp.os.os2.programmer Programming OS/2 machines.
comp.os.os9
               Discussions about the os9 operating system.
                    Operating systems and related areas. (Moderated)
comp.os.research
comp.os.vms
               DEC's VAX* line of computers & VMS.
comp.os.xinu
                   The XINU operating system from Purdue (D. Comer).
                    Massively parallel hardware/software. (Moderated)
comp.parallel
comp.periphs
                   Peripheral devices.
comp.periphs.scsi
                   Discussion of SCSI-based peripheral devices.
comp.protocols.appletalk
                           Applebus hardware & software.
comp.protocols.ibm Networking with IBM mainframes.
comp.protocols.iso The ISO protocol stack.
comp.protocols.kerberos The Kerberos authentication server.
comp.protocols.kermit
                        Info about the Kermit package. (Moderated)
comp.protocols.misc Various forms and types of FTP protocol.
comp.protocols.nfs Discussion about the Network File System protocol.
comp.protocols.tcp-ip
                       TCP and IP network protocols.
comp.protocols.tcp-ip.ibmpc TCP/IP for IBM(-like) personal computers.
                   Issues related to real-time computing.
comp.realtime
comp.research.japan The nature of research in Japan. (Moderated)
comp.risks
               Risks to the public from computers & users. (Moderated)
comp.robotics
                   All aspects of robots and their applications.
comp.simulation
                    Simulation methods, problems, uses. (Moderated)
comp.society
                   The impact of technology on society. (Moderated)
comp.society.development
                            Computer technology in developing countries.
comp.society.folklore
                        Computer folklore & culture, past & present. (Moderated)
comp.society.futures
                        Events in technology affecting future computing.
comp.software-eng Software Engineering and related topics.
comp.sources.3b1
                   Source code-only postings for the AT&T 3b1. (Moderated)
comp.sources.acorn Source code-only postings for the Acorn. (Moderated)
comp.sources.amiga Source code-only postings for the Amiga. (Moderated)
comp.sources.apple2 Source code and discussion for the Apple2. (Moderated)
                        Source code-only postings for the Atari ST. (Moderated)
comp.sources.atari.st
```

```
Bug reports, fixes, discussion for posted sources.
comp.sources.bugs
                    For any discussion of source postings.
comp.sources.d
comp.sources.games
                    Postings of recreational software. (Moderated)
comp.sources.games.bugs Bug reports and fixes for posted game software.
                    Programs for the HP48 and HP28 calculators. (Moderated)
comp.sources.hp48
comp.sources.mac
                    Software for the Apple Macintosh. (Moderated)
comp.sources.misc
                    Posting of software. (Moderated)
comp.sources.reviewed
                        Source code evaluated by peer review. (Moderated)
                    Software for Sun workstations. (Moderated)
comp.sources.sun
                    Postings of complete, UNIX-oriented sources. (Moderated)
comp.sources.unix
comp.sources.wanted Requests for software and fixes.
comp.sources.x
                    Software for the X windows system. (Moderated)
comp.specification Languages and methodologies for formal specification.
comp.specification.z
                        Discussion about the formal specification notation Z.
comp.std.c
                Discussion about C language standards.
comp.std.c++
                    Discussion about C++ language, library, standards.
                    Discussion about international standards.
comp.std.internat
comp.std.misc
                    Discussion about various standards.
comp.std.mumps
                    Discussion for the X11.1 committee on Mumps. (Moderated)
comp.std.unix
                    Discussion for the P1003 committee on UNIX. (Moderated)
comp.sw.components Software components and related technology.
comp.sys.3b1
                    Discussion and support of AT&T 7300/3B1/UnixPC.
comp.sys.acorn
                    Discussion on Acorn and ARM-based computers.
comp.sys.alliant
                   Info and discussion about Alliant computers.
comp.sys.amiga.advocacy Why an Amiga is better than XYZ.
comp.sys.amiga.announce Announcements about the Amiga. (Moderated)
comp.sys.amiga.applications Miscellaneous applications.
comp.sys.amiga.audio
                        Music, MIDI, speech synthesis, other sounds.
comp.sys.amiga.datacomm Methods of getting bytes in and out.
comp.sys.amiga.emulations
                            Various hardware & software emulators.
comp.sys.amiga.games
                        Discussion of games for the Commodore Amiga.
comp.sys.amiga.graphics Charts, graphs, pictures, etc.
comp.sys.amiga.hardware Amiga computer hardware, Q&A, reviews, etc.
comp.sys.amiga.introduction Group for newcomers to Amigas.
comp.sys.amiga.marketplace Where to find it, prices, etc.
comp.sys.amiga.misc Discussions not falling in another Amiga group.
comp.sys.amiga.multimedia
                            Animations, video, & multimedia.
comp.sys.amiga.programmer
                            Developers & hobbyists discuss code.
comp.sys.amiga.reviews
                            Reviews of Amiga software, hardware. (Moderated)
comp.sys.apollo
                    Apollo computer systems.
comp.sys.apple2
                    Discussion about Apple II micros.
comp.sys.atari.8bit Discussion about 8 bit Atari micros.
                  Discussion about 16 bit Atari micros.
comp.sys.atari.st
comp.sys.atari.st.tech Technical discussions of Atari ST hard/software.
comp.sys.att
                    Discussions about AT&T microcomputers.
comp.sys.cbm
                    Discussion about Commodore micros.
comp.sys.concurrent The Concurrent/Masscomp line of computers. (Moderated)
comp.sys.dec
                    Discussions about DEC computer systems.
comp.sys.dec.micro DEC Micros (Rainbow, Professional 350/380)
comp.sys.encore
                    Encore's MultiMax computers.
                Discussion about Hewlett-Packard equipment.
comp.sys.hp
```

```
comp.sys.ibm.pc.misc
                        Discussion about IBM personal computers.
comp.sys.ibm.pc.digest The IBM PC, PC-XT, and PC-AT. (Moderated)
comp.sys.ibm.pc.hardware
                            XT/AT/EISA hardware, any vendor.
comp.sys.ibm.pc.rt Topics related to IBM's RT computer.
                            Microchannel hardware, any vendor.
comp.sys.ibm.ps2.hardware
comp.sys.intel
                    Discussions about Intel systems and parts.
comp.sys.isis
                    The ISIS distributed system from Cornell.
comp.sys.laptops
                    Laptop (portable) computers.
                    Discussion about 6809's.
comp.sys.m6809
                    Discussion about 68k's.
comp.sys.m68k
comp.sys.m68k.pc
                    Discussion about 68k-based PCs. (Moderated)
comp.sys.m88k
                    Discussion about 88k-based computers.
comp.sys.mac.announce
                        Important notices for Macintosh users. (Moderated)
comp.sys.mac.apps
                    Discussions of Macintosh applications.
comp.sys.mac.comm
                    Discussion of Macintosh communications.
comp.sys.mac.digest Apple Macintosh: info&uses, but no programs. (Moderated)
comp.sys.mac.games Discussions of games on the Macintosh.
                        Macintosh hardware issues & discussions.
comp.svs.mac.hardware
comp.sys.mac.hypercard The Macintosh Hypercard: info & uses.
comp.sys.mac.misc
                    General discussions about the Apple Macintosh.
comp.sys.mac.programmer Discussion by people programming the Apple Macintosh.
comp.sys.mac.system Discussions of Macintosh system software.
comp.sys.mac.wanted Postings of "I want XYZ for my Mac."
                    Systems based on MIPS chips.
comp.sys.mips
                    Discussion about computers of all kinds.
comp.sys.misc
comp.sys.ncr
                    Discussion about NCR computers.
comp.sys.next
                    NeXT's workstations, peripherals, and software.
comp.sys.next.announce Announcements related to the NeXT computer system. (Moderated)
comp.sys.next.misc General discussion about the NeXT computer system.
comp.sys.next.programmer
                            NeXT related programming issues.
comp.sys.next.sysadmin Discussions related to NeXT system administration.
comp.sys.nsc.32k
                    National Semiconductor 32000 series chips.
comp.sys.novell
                    Discussion of Novell Netware products.
comp.sys.palmtops
                    Super-powered calculators the palm of your hand.
comp.sys.proteon
                    Proteon gateway products.
comp.sys.pyramid
                    Pyramid 90x computers.
comp.sys.ridge
                    Ridge 32 computers and ROS.
comp.sys.sequent
                    Sequent systems, (Balance and Symmetry).
                    Silicon Graphics's Iris workstations and software.
comp.sys.sgi
                    Sun "workstation" computers. (Moderated)
comp.sys.sun
comp.sys.tahoe
                    CCI 6/32, Harris HCX/7, & Sperry 7000 computers.
comp.sys.tandy
                    Discussion about TRS-80's.
comp.sys.ti
                Discussion about Texas Instruments.
comp.sys.transputer The Transputer computer and OCCAM language.
comp.sys.xerox
                    Xerox 1100 workstations and protocols.
comp.sys.zenith.z100
                        The Zenith Z-100 (Heath H-100) family of computers.
                    All sorts of terminals.
comp.terminals
                Text processing issues and methods.
comp.text
                   Technology & techniques of desktop publishing.
comp.text.desktop
                    ISO 8879 SGML, structured documents, markup languages.
comp.text.sqml
                    Discussion about the TeX and LaTeX systems & macros.
comp.text.tex
```

```
comp.theory.info-retrieval Information Retrieval topics. (Moderated)
comp.unix.admin
                    Administering a Unix-based system.
comp.unix.aix
                    IBM's version of UNIX.
                    Minix, SYSV4 and other *nix on an Amiga.
comp.unix.amiga
                    The version of UNIX for Apple Macintosh II computers.
comp.unix.aux
comp.unix.internals Discussions on hacking UNIX internals.
comp.unix.large
                    UNIX on mainframes and in large networks.
comp.unix.misc
                    Various topics that don't fit other groups.
                    MS-DOS running under UNIX by whatever means.
comp.unix.msdos
comp.unix.programmer
                        Q&A for people programming under Unix.
comp.unix.questions UNIX neophytes group.
comp.unix.shell
                    Using and programming the Unix shell.
comp.unix.sysv286
                    UNIX System V (not XENIX) on the '286.
comp.unix.sysv386
                    Versions of System V (not Xenix) on Intel 80386-based boxes.
comp.unix.ultrix
                    Discussions about DEC's Ultrix.
comp.unix.wizards
                    Questions for only true Unix wizards.
                        General discussions regarding XENIX (except SCO).
comp.unix.xenix.misc
comp.unix.xenix.sco XENIX versions from the Santa Cruz Operation.
comp.windows.interviews The InterViews object-oriented windowing system.
comp.windows.misc
                    Various issues about windowing systems.
comp.windows.ms
                    Window systems under MS/DOS.
comp.windows.ms.programmer Writing apps for MS Windows.
comp.windows.news
                    Sun Microsystems' NeWS window system.
comp.windows.open-look Discussion about the Open Look GUI.
                    Discussion about the X Window System.
comp.windows.x
comp.virus
                Computer viruses & security. (Moderated)
misc.activism.progressive
                            Information for Progressive activists. (Moderated)
                    Consumer interests, product reviews, etc.
misc.consumers
misc.consumers.house
                        Discussion about owning and maintaining a house.
misc.education
                    Discussion of the educational system.
misc.emerg-services Forum for paramedics & other first responders.
misc.entrepreneurs Discussion on operating a business.
misc.fitness
                    Physical fitness, exercise, etc.
misc.forsale
                    Short, tasteful postings about items for sale.
misc.forsale.computers Computers and computer equipment for sale.
                    Items of interest for/about the handicapped. (Moderated)
misc.handicap
misc.headlines
                    Current interest: drug testing, terrorism, etc.
                Investments and the handling of money.
misc.invest
misc.jobs.contract Discussions about contract labor.
misc.jobs.misc
                    Discussion about employment, workplaces, careers.
misc.jobs.offered
                    Announcements of positions available.
misc.jobs.resumes
                    Postings of resumes and "situation wanted" articles.
misc.kids
                Children, their behavior and activities.
misc.legal
                Legalities and the ethics of law.
misc.misc
                Various discussions not fitting in any other group.
misc.news.southasia News from Bangladesh, India, Nepal, etc. (Moderated)
                Devoted to issues concerning rural living.
misc.rural
                    Security in general, not just computers. (Moderated)
misc.security
                Tax laws and advice.
misc.taxes
                For testing of network software. Very boring.
misc.test
```

```
Requests for things that are needed (NOT software).
misc.wanted
misc.writing
                    Discussion of writing in all of its forms.
news.admin
                Comments directed to news administrators.
news.announce.conferences Calls for papers and conference announcements. (Moderated)
news.announce.important General announcements of interest to all. (Moderated)
news.announce.newgroups Calls for newgroups & announcements of same. (Moderated)
news.announce.newusers Explanatory postings for new users. (Moderated)
news.config
                Postings of system down times and interruptions.
                Discussions and lists of newsgroups.
news.groups
news.lists
                News-related statistics and lists. (Moderated)
news.lists.ps-maps Maps relating to USENET traffic flows. (Moderated)
news.misc
                Discussions of USENET itself.
                    Postings of new site announcements.
news.newsites
news.newusers.questions Q & A for users new to the Usenet.
news.software.anu-news VMS B-news software from Australian National Univ.
news.software.b
                    Discussion about B-news-compatible software.
                    Discussion about the "nn" news reader package.
news.software.nn
news.software.notes Notesfile software from the Univ. of Illinois.
news.software.readers
                        Discussion of software used to read network news.
                    Comments directed to system administrators.
news.sysadmin
rec.aquaria
                Keeping fish and aquaria as a hobby.
rec.arts.animation Discussion of various kinds of animation.
                    Japanese animation fen discussion.
rec.arts.anime
rec.arts.bodyart
                    Tattoos and body decoration discussions.
rec.arts.books
                    Books of all genres, and the publishing industry.
rec.arts.cinema
                    Discussion of the art of cinema. (Moderated)
                    Comic books and strips, graphic novels, sequential art.
rec.arts.comics
rec.arts.dance
                    Any aspects of dance not covered in another newsgroup.
rec.arts.disney
                    Discussion of any Disney-related subjects.
rec.arts.drwho
                    Discussion about Dr. Who.
                    Erotic fiction and verse. (Moderated)
rec.arts.erotica
                    Fine arts & artists.
rec.arts.fine
rec.arts.int-fiction
                        Discussions about interactive fiction.
                    Discussions about the arts not in other groups.
rec.arts.misc
rec.arts.movies
                    Discussions of movies and movie making.
rec.arts.movies.reviews Reviews of movies. (Moderated)
                    For the posting of poems.
rec.arts.poems
rec.arts.sf-lovers Science fiction lovers' newsgroup.
rec.arts.sf-reviews Reviews of science fiction/fantasy/horror works. (Moderated)
                    Star Trek, the TV shows and the movies.
rec.arts.startrek
rec.arts.startrek.info Information about the universe of Star Trek. (Moderated)
rec.arts.theatre
                    Discussion of all aspects of stage work & theatre.
rec.arts.tv
                The boob tube, its history, and past and current shows.
rec.arts.tv.soaps
                    Postings about soap operas.
                    Discussions of telly shows from the UK.
rec.arts.tv.uk
                    "A Prairie Home Companion" radio show discussion.
rec.arts.wobegon
                High fidelity audio.
rec.audio
                    Discussions of automobile audio systems.
rec.audio.car
rec.audio.high-end High-end audio systems. (Moderated)
```

rec.autos Automobiles, automotive products and laws. rec.autos.driving Driving automobiles. rec.autos.sport Discussion of organized, legal auto competitions. Technical aspects of automobiles, et. al. rec.autos.tech Issues pertaining to Volkswagon products. rec.autos.vw Aviation rules, means, and methods. rec.aviation Activities in the Great Outdoors. rec.backcountry rec.bicycles Bicycles, related products and laws. rec.birds Hobbyists interested in bird watching. rec.boats Hobbyists interested in boating. Talk about any boats with oars, paddles, etc. rec.boats.paddle rec.climbing Climbing techniques, competition announcements, etc. rec.collecting Discussion among collectors of many things. rec.crafts.misc Handiwork arts not covered elsewhere. rec.crafts.textiles Sewing, weaving, knitting and other fiber arts. rec.equestrian Discussion of things equestrian. rec.folk-dancing Folk dances, dancers, and dancing. rec.food.cooking Food, cooking, cookbooks, and recipes. rec.food.drink Wines and spirits. Recipes for interesting food and drink. (Moderated) rec.food.recipes rec.food.restaurants Discussion of dining out. rec.food.veg Vegetarians. rec.gambling Articles on games of chance & betting. rec.games.board Discussion and hints on board games. rec.games.board.ce The Cosmic Encounter board game. rec.games.bridge Hobbyists interested in bridge. rec.games.chess Chess & computer chess. rec.games.design Discussion of game design related issues. rec.games.empire Discussion and hints about Empire. rec.games.frp Discussion about Role Playing games. rec.games.go Discussion about Go. rec.games.hack Discussion, hints, etc. about the Hack game. rec.games.misc Games and computer games. Comments, hints, and info about the Moria game. rec.games.moria Various aspects of multi-users computer games. rec.games.mud rec.games.pbm Discussion about Play by Mail games. rec.games.pinball Discussing pinball-related issues. rec.games.programmer Discussion of adventure game programming. rec.games.rogue Discussion and hints about Roque. rec.games.trivia Discussion about trivia. rec.games.video Discussion about video games. rec.games.video.arcade Discussions about coin-operated video games. rec.gardens Gardening, methods and results. rec.guns Discussions about firearms. (Moderated) rec.humor Jokes and the like. May be somewhat offensive. rec.humor.d Discussions on the content of rec.humor articles. Jokes that are funny (in the moderator's opinion). (Moderated) rec.humor.funny Discussions about hunting. (Moderated) rec.hunting Magazine summaries, tables of contents, etc. rec.mag Discussion of the various martial art forms. rec.martial-arts rec.misc General topics about recreational/participant sports.

```
rec.models.rc
                    Radio-controlled models for hobbyists.
rec.models.rockets Model rockets for hobbyists.
                    Motorcycles and related products and laws.
rec.motorcycles
                        Music with afro-latin influences.
rec.music.afro-latin
                  Postings about the Fab Four & their music.
rec.music.beatles
rec.music.bluenote Discussion of jazz, blues, and related types of music.
                    CDs -- availability and other discussions.
rec.music.cd
rec.music.christian Christian music, both contemporary and traditional.
rec.music.classical Discussion about classical music.
                               C&W music, performers, performances, etc.
rec.music.country.western
rec.music.dementia Discussion of comedy and novelty music.
rec.music.dylan
                    Discussion of Bob's works & music.
rec.music.early
                    Discussion of pre-classical European music.
rec.music.folk
                    Folks discussing folk music of various sorts.
rec.music.funky
                    Funk, rap, hip-hop, house, soul, r&b and related.
rec.music.gaffa
                    Discussion of Kate Bush & other alternative music. (Moderated)
rec.music.gdead
                    A group for (Grateful) Dead-heads.
rec.music.industrial
                        Discussion of all industrial-related music styles.
rec.music.makers
                    For performers and their discussions.
rec.music.misc
                    Music lovers' group.
                    "New Age" music discussions.
rec.music.newage
rec.music.reviews
                    Reviews of music of all genres and mediums. (Moderated)
rec.music.synth
                    Synthesizers and computer music.
rec.music.video
                    Discussion of music videos and music video software.
                Hobbyists interested in naturist/nudist activities.
rec.nude
                Society for Creative Anachronism.
rec.org.sca
                Pets, pet care, and household animals in general.
rec.pets
rec.pets.cats
                        Discussion about domestic cats.
rec.pets.dogs
                    Any and all subjects relating to dogs as pets.
rec.photo
                Hobbyists interested in photography.
rec.puzzles
                Puzzles, problems, and quizzes.
                    Fireworks, rocketry, safety, & other topics.
rec.pyrotechnics
rec.radio.amateur.misc Amateur radio practices, contests, events, rules, etc.
rec.radio.amateur.packet
                               Discussion about packet radio setups.
rec.radio.amateur.policy
                               Radio use & regulation policy.
rec.radio.cb
                    Citizen-band radio.
                   Topics relating to noncommercial radio.
rec.radio.noncomm
rec.radio.shortwave Shortwave radio enthusiasts.
                    ffers to trade and swap radio equipment.
rec.radio.swap
rec.railroad
                    Real and model train fans' newsgroup.
                Running for enjoyment, sport, exercise, etc.
rec.running
                Hobbyists interested in SCUBA diving.
rec.scuba
                Hobbyists interested in snow skiing.
rec.skiing
rec.skydiving
                    Hobbyists interested in skydiving.
rec.sport.baseball Discussion about baseball.
rec.sport.basketball.college
                                Hoops on the collegiate level.
rec.sport.basketball.misc
                            Discussion about basketball.
                            Talk of professional basketball.
rec.sport.basketball.pro
rec.sport.cricket
                  Discussion about the sport of cricket.
rec.sport.disc
                    Discussion of flying disc based sports.
rec.sport.football.college US-style college football.
```

```
rec.sport.football.misc Discussion about American-style football.
rec.sport.football.pro US-style professional football.
rec.sport.golf
                    Discussion about all aspects of golfing.
rec.sport.hockey
                    Discussion about hockey.
rec.sport.misc
                    Spectator sports.
rec.sport.pro-wrestling Discussion about professional wrestling.
                    Discussion about the game of rugby.
rec.sport.rugby
                    Discussion about soccer (Association Football).
rec.sport.soccer
rec.sport.tennis
                    Things related to the sport of tennis.
rec.sport.volleyball
                        Discussion about volleyball.
rec.travel
                Traveling all over the world.
rec.video
                Video and video components.
rec.video.satellite Getting shows via satellite.
rec.windsurfing
                    Riding the waves as a hobby.
rec.woodworking
                    Hobbyists interested in woodworking.
sci.aeronautics
                    The science of aeronautics & related technology.
                Only scientifically-oriented postings about aquaria.
sci.aquaria
sci.archaeology
                    Studying antiquities of the world.
                Astronomy discussions and information.
sci.astro
sci.bio
                Biology and related sciences.
                Chemistry and related sciences.
sci.chem
sci.crypt
                Different methods of data en/decryption.
sci.econ
                The science of economics.
sci.edu
                The science of education.
                    Circuits, theory, electrons and discussions.
sci.electronics
                Discussions about energy, science & technology.
sci.energy
                Technical discussions about engineering tasks.
sci.engr
sci.engr.chem
                    All aspects of chemical engineering.
sci.environment
                    Discussions about the environment and ecology.
sci.geo.fluids
                    Discussion of geophysical fluid dynamics.
                    Discussion of solid earth sciences.
sci.geo.geology
sci.geo.meteorology Discussion of meteorology and related topics.
sci.lang
                Natural languages, communication, etc.
sci.lang.japan
                    The Japanese language, both spoken and written.
sci.logic
                Logic -- math, philosophy & computational aspects.
sci.math
                Mathematical discussions and pursuits.
                    Statistics discussion.
sci.math.stat
                    Symbolic algebra discussion.
sci.math.symbolic
                Medicine and its related products and regulations.
sci.med
                    AIDS: treatment, pathology/biology of HIV, prevention. (Moderated)
sci.med.aids
                    Issues of physics in medical testing/care.
sci.med.physics
                    Discussion about science & the military. (Moderated)
sci.military
sci.misc
                Short-lived discussions on subjects in the sciences.
sci.nanotech
                    Self-reproducing molecular-scale machines. (Moderated)
sci.optics
                Discussion relating to the science of optics.
sci.philosophy.tech Technical philosophy: math, science, logic, etc.
sci.physics
                Physical laws, properties, etc.
sci.physics.fusion Info on fusion, esp. "cold" fusion.
sci.psychology
                    Topics related to psychology.
sci.psychology.digest
                        PSYCOLOQUY: Refereed Psychology Journal and Newsletter.
```

```
(Moderated)
sci.research
                   Research methods, funding, ethics, and whatever.
sci.skeptic
               Skeptics discussing pseudo-science.
sci.space
               Space, space programs, space related research, etc.
sci.space.shuttle The space shuttle and the STS program.
sci.virtual-worlds Modelling the universe. (Moderated)
               College, college activities, campus life, etc.
soc.college
soc.college.grad
                   General issues related to graduate schools.
soc.college.gradinfo
                       Information about graduate schools.
soc.couples Discussions for couples (cf. soc.singles).
soc.culture.african Discussions about Africa & things African.
soc.culture.african.american
                               Discussions about Afro-American issues.
soc.culture.arabic Technological & cultural issues, *not* politics.
soc.culture.asean Countries of the Assoc. of SE Asian Nations.
soc.culture.asian.american Issues & discussion about Asian-Americans.
soc.culture.australian
                           Australian culture and society.
soc.culture.bangladesh Issues & discussion about Bangladesh.
soc.culture.british Issues about Britain & those of British descent.
soc.culture.canada Discussions of Canada and its people.
soc.culture.china About China and Chinese culture.
soc.culture.celtic Group about Celts (*not* basketball!).
soc.culture.europe Discussing all aspects of all-European society.
soc.culture.filipino
                       Group about the Filipino culture.
soc.culture.french French culture, history, and related discussions.
soc.culture.german Discussions about German culture and history.
soc.culture.greek Group about Greeks.
soc.culture.hongkong
                       Discussions pertaining to Hong Kong.
soc.culture.indian Group for discussion about India & things Indian.
soc.culture.iranian Discussions about Iran and things Iranian/Persian.
soc.culture.italian The Italian people and their culture.
soc.culture.japan Everything Japanese, except the Japanese language.
soc.culture.jewish Jewish culture & religion. (cf. talk.politics.mideast)
soc.culture.korean Discussions about Korean & things Korean.
soc.culture.latin-america
                           Topics about Latin-America.
soc.culture.lebanon Discussion about things Lebanese.
soc.culture.magyar The Hungarian people & their culture.
                   Group for discussion about other cultures.
soc.culture.misc
                   Discussion of people and things in & from Nepal.
soc.culture.nepal
soc.culture.new-zealand Discussion of topics related to New Zealand.
soc.culture.nordic Discussion about culture up north.
soc.culture.pakistan
                       Topics of discussion about Pakistan.
soc.culture.polish Polish culture, Polish past, and Polish politics.
soc.culture.soviet Topics relating to Russian or Soviet culture.
soc.culture.spain
                   Discussion of culture on the Iberian peninsula.
soc.culture.sri-lanka
                       Things & people from Sri Lanka.
soc.culture.taiwan Discussion about things Taiwanese.
                   Thai people and their culture.
soc.culture.thai
soc.culture.turkish Discussion about things Turkish.
soc.culture.vietnamese Issues and discussions of Vietnamese culture.
soc.culture.yugoslavia Discussions of Yugoslavia and its people.
```

Discussion of feminism & feminist issues. (Moderated) soc.feminism soc.history Discussions of things historical. Issues related to men, their problems & relationships. soc.men Socially-oriented topics not in other groups. soc.misc Issues pertaining to homosexuality. soc.motss Announcements, requests, etc. about people on the net. soc.net-people Political problems, systems, solutions. (Moderated) soc.politics soc.politics.arms-d Arms discussion digest. (Moderated) soc.religion.christian Christianity and related topics. (Moderated) Discussions of Eastern religions. (Moderated) soc.religion.eastern soc.religion.islam Discussions of the Islamic faith. (Moderated) soc.rights.human Human rights & activism (e.g., Amnesty International). soc.roots Genealogical matters. Newsgroup for single people, their activities, etc. soc.singles soc.veterans Social issues relating to military veterans. soc.women Issues related to women, their problems & relationships. All sorts of discussions and arguments on abortion. talk.abortion The unusual, bizarre, curious, and often stupid. talk.bizarre Discussion the state of the environment & what to do. talk.environment talk.origins Evolution versus creationism (sometimes hot!). talk.philosophy.misc Philosophical musings on all topics. talk.politics.drugs The politics of drug issues. talk.politics.guns The politics of firearm ownership and (mis)use. talk.politics.mideast Discussion & debate over Middle Eastern events. talk.politics.misc Political discussions and ravings of all kinds. talk.politics.soviet Discussion of Soviet politics, domestic and foreign. talk.politics.theory Theory of politics and political systems. talk.rape Discussions on stopping rape; not to be crossposted. talk.religion.misc Religious, ethical, & moral implications. talk.religion.newage Esoteric and minority religions & philosophies. For the posting of rumors. talk.rumors

_ -

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center, Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398 Internet: spaf@cs.purdue.edu phone: (317) 494-7825

[source]

^{*} UNIX is a registered trademark of UNIX System Laboratories, Inc.

^{*} DEC and Ultrix are Trademarks of the Digital Equipment Corporation.

^{*} VAX is a Trademark of the Digital Equipment Corporation.

^{*} Ada is a registered Trademark of the Ada Joint Program Office of the United States Department of Defense.

List of Moderators

Xref: blister news.lists:183 news.groups:7460 news.announce.newusers:65

Path: blister!jtsv16!torsqnt!news-server.csri.toronto.edu!rpi!zaphod.mps.ohio-

state.edu!samsung!news.cs.indiana.edu!purdue!spaf

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.lists,news.groups,news.announce.newusers

Subject: List of Moderators

Message-ID: <15406@ector.cs.purdue.edu>

Date: 25 Jul 91 23:16:07 GMT Expires: 23 Oct 91 23:16:06 GMT

Followup-To: news.lists

Organization: Dept. of Computer Sciences, Purdue Univ.

Lines: 456

Approved: spaf@cs.purdue.EDU

Supersedes: <14702@ector.cs.purdue.edu>

Original-from: Gene Spafford (spaf@cs.purdue.edu)

[Most recent change: 23 Jul 1991 by spaf@cs.purdue.edu (Gene Spafford)]

A number of moderated groups exist on the net. These are groups which usually have one or more individuals (acting as editors and/or moderators) who must approve articles before they are published to the net. In general, these groups fall into one of five categories:

- Groups with postings of an informative nature not suited to discussion and always originating from the same (very small) group of posters. Groups within this category include news.lists, news.announce.newusers, and comp.mail.maps.
- 2) Groups derived from regular groups with such a high volume that it is hard for the average reader to keep up. The moderated versions of these groups are an attempt to provide a lower volume and higher quality version of the same forum. An example of this category is news.announce.newgroups (a reduced form of news.groups).
- 3) Groups derived from regular groups which have often been abused. That is, the regular groups often received postings of items which were not germane to the stated topic of the group (or sometimes even within the realm of politeness for the net). This also includes groups suffering from an annoying number of duplicate postings and inappropriate followups. Moderated groups in this category include comp.sources.unix.
- 4) Groups designed to serve also as direct feedback to an off-the-net group. The discussion in comp.std.mumps is an example of this.
- 5) Groups which are gatewayed into the Usenet from an Internet

mailing list. These groups are moderated by someone on the Internet side but are shared with the Usenet population. Submissions mailed to the proper addresses, given below, will appear in both the group on Usenet, and the Internet list. This includes some groups in the "inet" distribution which are listed here for completeness: comp.ai.vision and rec.mag.fsfnet.

To post to a moderated group, write your article and mail it to the listed SUBMISSION address. The moderator will then do the actual posting of the article. The news software on the Usenet will not allow direct posting to moderated newsgroups, nor will it forward unauthorized articles to other sites. The only way to post to a moderated group is to mail it to the moderator. If you are running 2.11 news or later, your news software will automatically mail your article to the moderator if you attempt to post it. Thus, posting to a moderated newsgroup should appear the same as posting to any other group (except you don't see the posting right away).

Depending on the newsgroup involved, if the moderator feels that your article is inappropriate for the group, s/he will return the article to you with a suggestion for other newsgroups in which to post it, and/or an explanation of why it is not appropriate for the moderated group. You may still post such articles to the regular groups as you currently do, if such groups exist.

If you have questions or complaints about the way a moderated group is run, contact the moderator by mail. Alternatively, you can send mail to the mailing list "moderators@cs.purdue.edu" and it will be rebroadcast to all of the current Usenet-only newsgroup moderators.

Below is a list of the current moderated groups and the moderators of those groups. Included in that list are the addresses to use if you have questions of comments about the groups. After that is given a list of addresses for submissions of articles to those groups. If your site is running 2.10.2 or 2.10.3 news, these addresses can be used to build the "moderators" file so that "postnews" can automatically mail an article to the correct moderator.

If your system is running 2.11 news, posting to moderated newsgroups is done by mailing your submission to well-defined aliases at a nearby well-connected site. The mail path to that site should be in your news library, in the file "mailpaths" -- there is no need to update a moderators file. Information on how to construct the paths in the "mailpaths" file are posted in a companion article.

If you are NOT running 2.11 news, you are *STRONGLY* advised to upgrade to it so as to take advantage of this feature, as well as the numerous bug fixes and other enhancements.

The addresses below are given in Internet/domain form. If you are a UUCP-only site, you can mail to an Internet (EDU, GOV, etc.)-only site

```
by mailing through the gateways using a uucp-style path, e.g.:
    ...!{mcnc,rutgers,ucsd,uunet,uw-beaver,watmath}!site.domain!address
Gene Spafford
25 Jul 1991
Group
   Moderator or Coordinator Requests, Comments, etc.
comp.ai.nlang-know-rep
   Christopher Welty nl-kr-request@cs.rpi.edu
comp.ai.vision
   Tod Levitt
               vision-list-request@ads.com
comp.archives
   Edward Vielmetti
                       comp-archives@msen.com
comp.binaries.acorn
   Alan Glover
                   moderator@acorn.co.uk
comp.binaries.amiga
   Tad Guy
                   amiga-request@uunet.uu.net
comp.binaries.atari.st
   Steven Grimm
                       atari-binaries@twitterpater.eng.sun.com
comp.binaries.ibm.pc
   Bill Davidsen
                        ibmbin-request@crdgw1.crd.ge.com
comp.binaries.mac
   Roger Long
                   macintosh-request%felix.uucp@uunet.uu.net
comp.binaries.os2
   Tom Haapanen
                       os2bin-request@mims-iris.waterloo.edu
comp.bugs.4bsd.ucb-fixes
   Keith Bostic
                       ucb-fixes-request@okeeffe.berkeley.edu
comp.compilers
   John Levine
                   compilers-request@iecc.cambridge.ma.us
comp.dcom.telecom
   Patrick Townson
                       telecom-request@eecs.nwu.edu
comp.doc
   Brian Kantor
                       comp-doc@ucsd.edu
comp.doc.techreports
   (dormant)
comp.lang.sigplan
   Stu Feldman
                   sigplan-request@bellcore.com
comp.laser-printers
   Richard Furuta
                       furuta@cs.umd.edu
comp.mail.maps
   Mel Pleasant
                       uucpmap@rutgers.edu
comp.newprod
   Ron Heiby
                   newprod-request@chg.mcd.mot.com
comp.org.fidonet
   Tim Pozar
                   pozar@hop.toad.com
comp.os.research
   Darrell Long
                       darrell@jupiter.ucsc.edu
comp.parallel
   Dennis Stevenson
                       hypercube-request@hubcap.clemson.edu
```

comp.protocols.kermit Frank da Cruz info-kermit-request@watsun.cc.columbia.edu comp.research.japan Rick Schlichting rick@cs.arizona.edu comp.risks Peter G. Neumann risks-request@csl.sri.com comp.simulation Paul A. Fishwick simulation-request@uflorida.cis.ufl.edu comp.society Greg Walsh socicom@auvm.american.edu comp.society.folklore Eric Raymond eric@snark.thyrsus.com comp.sources.3b1 David H. Brierley dave@galaxia.newport.ri.us comp.sources.acorn Alan Glover moderator@acorn.co.uk comp.sources.amiga Tad Guy amiga-request@uunet.uu.net comp.sources.apple2 Jonathan Chandross jac@paul.rutgers.edu comp.sources.atari.st Steven Grimm atari-sources@twitterpater.eng.sun.com comp.sources.games Bill Randle games-request@saab.cna.tek.com comp.sources.hp48 Chris Spell spell@seq.uncwil.edu comp.sources.mac Roger Long macintosh-request%felix.uucp@uunet.uu.net comp.sources.misc Kent Landfield sources-misc-request@uunet.uu.net comp.sources.reviewed Andrew Patrick csr@calvin.doc.ca comp.sources.sun Charles McGrew mcgrew@aramis.rutgers.edu comp.sources.unix Rich Salz rsalz@uunet.uu.net comp.sources.x Dan Heller arqv@sun.com comp.std.announce John C. Klensin klensin@infoods.mit.edu comp.std.mumps Hokey std-mumps-request@plus5.com comp.std.unix Sean Eric Fagan std-unix-request@uunet.uu.net comp.sys.amiga.announce Dan Zerkle zerkle@iris.eecs.ucdavis.edu comp.sys.amiga.reviews Jason Tibbitts III honp@menudo.uh.edu comp.sys.concurrent Stan Barber concurrent-request@soma.bcm.tmc.edu comp.sys.ibm.pc.digest

```
Gregory Hicks
                        info-ibmpc-request@simtel20.army.mil
comp.sys.m68k.pc
    Mike Meyer
                    info-68k-request@ucbvax.berkeley.edu
comp.sys.mac.announce
    Werner Uhrig
                        werner@rascal.ics.utexas.edu
comp.sys.mac.digest
    Lance Nakata, Jon Pugh,
        & Dwayne Virnau info-mac-request@sumex-aim.stanford.edu
comp.sys.next.announce
    Pascal Chesnais
                        csn-announce-request@media.mit.edu
comp.sys.sun
    Robert D. Greene
                        sun-spots-request@rice.edu
comp.theory.info-retrieval
                engle@cmsa.berkeley.edu
comp.virus
    Kenneth van Wyk
                        krvw@cert.sei.cmu.edu
misc.activism.progressive
    Rich Winkel
                    map-request@pencil.cs.missouri.edu
misc.handicap
    Bill McGarry
                        wtm@bunker.shel.isc-br.com
misc.news.southasia
    Surekha Gaddam
                        gaddam@remus.rutgers.edu
misc.security
    A. "*Hobbit*" Walker
                            security-request@rutgers.edu
news.announce.conferences
                    denny@tekbspa.tss.com
    Dennis Page
news.announce.important
    Mark Horton
                    announce@stargate.com
news.announce.newgroups
    Dave Lawrence
                        tale@rpi.edu
news.announce.newusers
    Gene Spafford
                        spaf@purdue.edu
news.lists
    Rick Adams, Brian Reid &
       Gene Spafford
                        news-lists-request@cs.purdue.edu
news.lists.ps-maps
    Brian Reid
                    reid@decwrl.dec.com
rec.arts.cinema
                        thakur@zerkalo.harvard.edu
    Manavendra Thakur
rec.arts.erotica
    Evan Leibovitch
                        erotica@telly.on.ca
rec.arts.movies.reviews
    Evelyn C. Leeper
                        movies-request@mtgzy.att.com
rec.arts.sf-reviews
    Michael C. Berch, Dan'l Danehy-Oakes,
            Evelyn Leeper, Wayne Throop,
            Alan Wexelblat, &
        Bill Wisner
                        sf-reviews@presto.ig.com
rec.arts.startrek.info
    Jim Griffith
                        trek-info-request@dweeb.fx.com
rec.audio.high-end
```

Thomas Krueger info-high-audio-request@csd4.csd.uwm.edu rec.food.recipes Andrew Mossberg aem@mthvax.cs.miami.edu rec.quns Jim Purtilo gun-control@flubber.cs.umd.edu rec.humor.funny Brad Templeton funny-request@looking.on.ca rec.hunting Tim Rigg hunting-request@osnome.che.wisc.edu rec.mag.fsfnet John White white@duvm.bitnet rec.music.gaffa Bill Wisner love-hounds-request@eddie.mit.edu rec.music.reviews Stewart Evans stewarte@sco.com sci.med.aids Dan Greening aids-request@cs.ucla.edu sci.military Bill Thacker military-request@att.att.com sci.nanotech J. Storrs Hall (JoSH) josh@aramis.rutgers.edu sci.psychology.digest Stevan Harnad psyc-request@phoenix.princeton.edu sci.virtual-worlds Bob Jacobson virtual-worlds-request@milton.u.washington.edu soc.feminism Jean Marie Diaz, Miriam Nadel, & Cindy Tittle feminism-request@ncar.ucar.edu soc.politics Charles McGrew poli-sci-request@rutgers.edu soc.politics.arms-d arms-d-request@xx.lcs.mit.edu Herb Lin soc.religion.christian Charles Hedrick christian-request@aramis.rutgers.edu soc.religion.eastern Dinesh Prabhu prabhu@amelia.nas.nasa.gov soc.religion.islam religion-islam-request@ncar.ucar.edu Naim Abdullah, Behnam Sadeghi, & Shari VanderSpek alt.gourmand Brian Reid recipes-request@decwrl.dec.com bit.listserv.big-lan John Wobus big-mod@suvm.acs.syr.edu bit.listserv.edtech 21765EDT%MSU@CUNYVM.CUNY.EDU EDTECH Moderator bit.listserv.gaynet Bill Cattey gaynet-request@athena.mit.edu bit.listserv.hellas Alexandros Couloumbis ALEX@AUVM.american.edu

```
bit.listserv.infonets
       List Manager
                               owner-info-nets@think.com
bit.listserv.l-hcap
       Bill McGarry
                               wtm@bunker.shel.isc-br.com
bit.listserv.new-list
       Marty Hoag
                               INFO@VM1.NoDak.EDU
bit.listserv.valert-l
       Kenneth R. van Wyk
                               krvw@cert.sei.cmu.edu
ieee.announce
   Burt Juda
                   burt@ieee.org
ieee.compmail.announce
   Burt Juda
                   burt@ieee.org
ieee.news.announce
   Burt Juda
                   burt@ieee.org
ieee.rab.announce
   Burt Juda
                   burt@ieee.org
ieee.tab.announce
   Burt Juda
                   burt@ieee.org
ieee.usab.announce
   Burt Juda
                   burt@ieee.org
anu.*
   Leonard H. Tower Jr.
                           info-gnu-request@prep.ai.mit.edu
vmsnet.announce
   Terry Poot
                   tp@mccall.com
vmsnet.announce.newusers
   Terry Poot
                   tp@mccall.com
vmsnet.sources
   Mark Berryman
                       vmsnet-sources-request@mvb.saic.com
                   Submissions
Group
|-----
comp.ai.nlang-know-rep
                           nl-kr@cs.rpi.edu
comp.ai.vision
                       vision-list@ads.com
comp.archives
                       comp-archives@msen.com
comp.binaries.acorn
                       submit@acorn.co.uk
comp.binaries.amiga
                       amiga@uunet.uu.net
comp.binaries.atari.st
                           atari-binaries@twitterpater.eng.sun.com
comp.binaries.ibm.pc
                           ibmbin@crdgw1.crd.ge.com
comp.binaries.mac
                       macintosh%felix.uucp@uunet.uu.net
                       os2bin@mims-iris.waterloo.edu
comp.binaries.os2
comp.bugs.4bsd.ucb-fixes
                           ucb-fixes@okeeffe.berkeley.edu
comp.compilers
                       compilers@iecc.cambridge.ma.us
comp.dcom.telecom
                       telecom@eecs.nwu.edu
comp.doc
                   comp-doc@ucsd.edu
comp.lang.sigplan
                       sigplan@bellcore.com
comp.laser-printers
                       laser-lovers@brillig.umd.edu
                       uucpmap@rutgers.edu
comp.mail.maps
                       newprod@chg.mcd.mot.com
comp.newprod
                       pozar@hop.toad.com
comp.org.fidonet
                       darrell@jupiter.ucsc.edu
comp.os.research
```

```
comp.parallel
                        hypercube@hubcap.clemson.edu
comp.protocols.kermit
                             info-kermit@watsun.cc.columbia.edu
comp.research.japan
                        japan@cs.arizona.edu
comp.risks
                    risks@csl.sri.com
comp.simulation
                        simulation@uflorida.cis.ufl.edu
comp.society
                        socicom@auvm.american.edu
comp.society.folklore
                             folklore@snark.thyrsus.com
comp.sources.3b1
                        comp-sources-3b1@galaxia.newport.ri.us
comp.sources.acorn
                        submit@acorn.co.uk
comp.sources.amiga
                        amiga@uunet.uu.net
comp.sources.apple2
                        jac@paul.rutgers.edu
comp.sources.atari.st
                            atari<-sources@twitterpater.eng.sun.com
comp.sources.games
                        games@saab.cna.tek.com
comp.sources.hp48
                        hp48@seq.uncwil.edu
comp.sources.mac
                        macintosh%felix.uucp@uunet.uu.net
comp.sources.misc
                        sources-misc@uunet.uu.net
comp.sources.reviewed
                            csr@calvin.doc.ca
comp.sources.sun
                        sun-sources@topaz.rutgers.edu
comp.sources.unix
                        rsalz@uunet.uu.net
comp.sources.x
                        arqv@sun.com
comp.std.announce
                        klensin@infoods.mit.edu
                        std-mumps@plus5.com
comp.std.mumps
comp.std.unix
                        std-unix@uunet.uu.net
comp.sys.amiga.announce
                            announce@iris.eecs.ucdavis.edu
comp.sys.amiga.reviews
                            honp9@menudo.uh.edu
comp.sys.concurrent
                        concurrent@soma.bcm.tmc.edu
comp.sys.ibm.pc.digest
                            info-ibmpc@simtel20.army.mil
comp.sys.m68k.pc
                        info-68k@ucbvax.berkeley.edu
                            csma@rascal.ics.utexas.edu
comp.sys.mac.announce
comp.sys.mac.digest
                        info-mac@sumex-aim.stanford.edu
comp.sys.next.announce
                            csn-announce@media.mit.edu
                        sun-spots@rice.edu
comp.sys.sun
comp.theory.info-retrieval ir-l%uccvma.bitnet@berkeley.edu
                    krvw@cert.sei.cmu.edu
comp.virus
misc.activism.progressive
                            map@pencil.cs.missouri.edu
misc.handicap
                        handicap@bunker.shel.isc-br.com
misc.news.southasia
                        gaddam@remus.rutgers.edu
misc.security
                        security@rutgers.edu
news.announce.conferences
                            nac@tekbspa.tss.com
news.announce.important
                            announce@stargate.com
                            announce-newgroups@rpi.edu
news.announce.newgroups
                            spaf@cs.purdue.edu
news.announce.newusers
                    news-lists-request@cs.purdue.edu
news.lists
news.lists.ps-maps
                        reid@decwrl.dec.com
                        cinema@zerkalo.harvard.edu
rec.arts.cinema
rec.arts.erotica
                        erotica@telly.on.ca
                            movies@mtgzy.att.com
rec.arts.movies.reviews
rec.arts.sf-reviews
                        sf-reviews@presto.ig.com
rec.arts.startrek.info
                            trek-info@dweeb.fx.com
                        info-high-audio@csd4.csd.uwm.edu
rec.audio.high-end
                        recipes@mthvax.cs.miami.edu
rec.food.recipes
```

```
rec.guns
                    magnum@flubber.cs.umd.edu
rec.humor.funny
                        funny@looking.on.ca
rec.hunting
                    hunting@osnome.che.wisc.edu
                        white@duvm.bitnet
rec.mag.fsfnet
rec.music.gaffa
                        gaffa-post@eddie.mit.edu
rec.music.reviews
                        music reviews@sco.com
sci.med.aids
                        aids@cs.ucla.edu
sci.military
                        military@att.att.com
sci.nanotech
                        nanotech@aramis.rutgers.edu
sci.psychology.digest
                            psyc@phoenix.princeton.edu
sci.virtual-worlds
                        virtual-worlds@milton.u.washington.edu
soc.feminism
                        feminism@ncar.ucar.edu
soc.politics
                        poli-sci@rutgers.edu
soc.politics.arms-d
                        arms-d@xx.lcs.mit.edu
soc.religion.christian
                            christian@aramis.rutgers.edu
soc.religion.eastern
                            prabhu@amelia.nas.nasa.gov
soc.religion.islam
                        religion-islam@ncar.ucar.edu
gnu.announce
                        info-gnu@prep.ai.mit.edu
gnu.bash.bug
                        bug-bash@prep.ai.mit.edu
gnu.emacs.announce
                        info-gnu-emacs@prep.ai.mit.edu
gnu.emacs.bug
                        bug-gnu-emacs@prep.ai.mit.edu
gnu.g++.announce
                        info-g++@prep.ai.mit.edu
gnu.g++.bug
                    bug-g++@prep.ai.mit.edu
gnu.g++.lib.bug
                        bug-lib-g++@prep.ai.mit.edu
gnu.gcc.announce
                        info-gcc@prep.ai.mit.edu
gnu.gcc.bug
                    bug-gcc@prep.ai.mit.edu
gnu.gdb.bug
                    bug-gdb@prep.ai.mit.edu
gnu.ghostscript.bug
                        bug-ghostscript@prep.ai.mit.edu
gnu.groff.bug
                        bug-groff@prep.ai.mit.edu
gnu.smalltalk.bug
                        bug-gnu-smalltalk@prep.ai.mit.edu
gnu.utils.bug
                        bug-gnu-utils@prep.ai.mit.edu
alt.comp.acad.freedom.news
                            kadie@eff.org
alt.gourmand
                        recipes@decwrl.dec.com
alt.society.ati
                        gzero@tronsbox.xei.com
alt.society.cu-digest
                            tk0jut2@mvs.cso.niu.edu
                                comp-bio-moderator@genbank.bio.net
bionet.biology.computational
bionet.molbio.genbank.updates
                                lear@genbank.bio.net
bit.listserv.big-lan
                                big-lan@suvm.acs.syr.edu
bit.listserv.edtech
                                21765edt%msu@cunyvm.cuny.edu
bit.listserv.gaynet
                                gaynet@athena.mit.edu
bit.listserv.hellas
                                alex@auvm.american.edu
bit.listserv.infonets
                                info-nets@think.com
bit.listserv.l-hcap
                                wtm@bunker.shel.isc-br.com
bit.listserv.new-list
                                nu021172@vm1.nodak.edu
bit.listserv.valert-l
                                krvw@cert.sei.cmu.edu
                        scoannmod@xenitec.on.ca
biz.sco.announce
                        ieee-announce@ieee.org
ieee.announce
                            ieee-compmail-announce@ieee.org
ieee.compmail.announce
                        ieee-news-announce@ieee.org
ieee.news.announce
                        ieee-rab-announce@ieee.org
ieee.rab.announce
                        ieee-tab-announce@ieee.org
ieee.tab.announce
```

ieee.usab.announce
vmsnet.announce
vmsnet

vmsnet.announce.newusers vmsnet-announce-newusers@mccall.com

vmsnet.sources vmsnet-sources@mvb.saic.com

ddn.mgt-bulletin nic@nic.ddn.mil ddn.newsletter nic@nic.ddn.mil comp.org.eff.news effnews@eff.org

comp.protocols.iso.x400.gateway ifip-gtwy-usenet@ics.uci.edu

comp.security.announce cert@cert.sei.cmu.edu

--

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center,

Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398

Internet: spaf@cs.purdue.edu phone: (317) 494-7825

Publicly Accessible Mailing Lists

```
From: spaf@cs.purdue.EDU (Gene Spafford)
Newsgroups: news.lists,news.announce.newusers
Subject: Publicly Accessible Mailing Lists, Part I
Summary: 259 mailing lists in three postings
Message-ID: <15407@ector.cs.purdue.edu>
Date: 25 Jul 91 23:16:08 GMT
Expires: 23 Oct 91 23:16:08 GMT
Followup-To: news.lists
Organization: Dept. of Computer Sciences, Purdue Univ.
Lines: 844
Approved: spaf@cs.purdue.EDU
Supersedes: <14703@ector.cs.purdue.edu>
Original-from: chuq@apple.COM (Chuq Von Rospach)
[Most recent change: 23 Jul 1991 by spaf@cs.purdue.edu (Gene Spafford)]
[This is the first of three articles on mailing lists.]
Quick Summary of Changes
  Added since last list:
    act-up
                            adoption
                                                    agenda-users
    BETA
                            brass
                                                    feminism-digest
                                                    ipsc-managers
    alove-list
                            immune
                                                    tx-firearms
    silva
                            SQL-sybase
    ultralite-list
                            ZForum
 Deleted since last list:
    ensembles
                            film-makers
                                                    Gouldbugs
                                                    OtherRealms
    info-soar
                            joke-s
    zilog
  Changed since last list:
    alternates
                            bread
                                                    british-cars
    dirt-users
                            handicap
                                                    macqyver
    martial-arts
                            MasPar
                                                    medphys
                            recovery
                                                    stagecraft
   men
    stormcock
                            T-E-L
                                                    tadream
    whitewater
                            wildnet
Intro
This is a list of mailing lists available primarily on the UUCP
network. A mailing list is different from a newsgroup because you do
not receive anything unless you specifically request it. To be added to
a mailing list, please mail a note to the contact for that list, listed
below.
```

Some of the lists mentioned may be available as limited-distribution newsgroups. Contact the administrator for exact details.

Please note the following caveats: publication of a list here does not guarantee that you will be allowed to join as a member. That is up to the moderator and readers, and they have the right to restrict access to their list as they see fit. Mailing lists use MUCH less system overhead on a world-wide basis but do tend to increase loading on the moderators' machines so the number of people that can be added to a list may be limited by machine resources as well.

Steven Bjork at the Network Information Systems Center maintains a list of mailing lists that exist primarily on the Internet. That list overlaps this one in a few places, but the lists are largely distinct. A copy of that list may be obtained by anonymous ftp from the site ftp.nisc.sri.com (192.33.33.22) in the file "netinfo/interest-groups". To add or delete an entry to that list, mail to interest-groups-request@nisc.sri.com.

The list does not include any of the many hundreds of lists that are available through various Bitnet ListServ sites.

If you have a list that you want added to this posting or are interested in starting a list but don't know how, drop me a note at spaf@purdue.edu

Groups listed in this posting

12step 30something 386users 3D ABC act-up adoption aeronautics agenda-users aids AIDS-stat algeria-net alife Alspa alternates animal-rights anneal antique-radios antiques argentina AoN argproc att-pc+ autox backstreets hallroom. bears BETA Between-the-lines big-DB biosym blackbird BMW brasil brass bread british-cars C-IBM-370 ca-firearms cabot Cards cavers cdforum chalkhills chem-eng chem-talk christian cisco clu CoCo comix commune compress cryonics ctree CUSSNET cyberpunkRPG CZdecstation-managers derby DGRD dirt-users Donosy drwho-spoilers Dual-personalities eastender

eclipse ecuador edge empire-list emtex-user **Episcopal** euro-moto esperanto ethology f-mac feminism-digest feminists Fiction-Writers ferrets firearms Flat-Fields flamingo flashlife folk-dancing fourd framers gamedesign-philo funky-music fsuucp glove-list gnu-manual handicap hang-gliding health-ed hey-joe homebrew honda horse **IBDlist** iclinfo hyperami immune info-aids impulse info-altos info-encore info-ccc info-futures info-qnu info-high-audio info-ingres info-prime info-solbourne info-sparc info-tahoe info-vm informix-list info-vw ipsc-managers irclist italian-cars islam iti151 J-Pop **jewish** killifish jump-in-the-river khoros kites lang-lucid lasnet lds LickVista Linda Logo lojban mac-security martial-arts magic manchester mazda-list MasPar matlab medphys military men mr2-interest mtxinu-users muscle-cars musicals mustangs mystery NA-Net NativeNet Ncube Network-audio-bits neuron newlists NewsCom ntp nucmed numeric-interest objc objectivism ocean.policy objectivism-philosophy ODA oh-motss offroad oracle orienteering origami pagan Papa pc532 pdp8-lovers Peru pharm picasso-users pipes porschephiles posix-ada **PRL** posix-testing Prion qn Ouanta progress Queen rc-flying recovery REM rush S-news sappho SCO-list sca scoodt scribe security SFER-1 sil-info silva smail3-wizards SkillsBank smail3-users smiths-fans sports-cards SQL-sybase srv4-admin stagecraft stardent-users stormcock sun-386i sun-managers supercomputers sun-nets sysops

T-E-L t3 tadream tandy4k tartan-c tcad

tcp-group tekumel testing-archive

testing-research thicva think-c
TolkLang torg towers
transputer traveller turnabout
tx-firearms uk-motss ultralite-list
Unisys UPS-alumni uruguay

usenet.hist usml venezuela

VMEbus weights whitewater

wildnet windsurfing x-ada

XGKS yello Yes/ABWH

Yiddish Z-cars zeppelin

ZForum

Specific Information on Groups

12step

Contact: suhre@trwrb.dsd.trw.com (Maurice Suhre)

Purpose: To discuss/share experiences about 12 step programs such as Alcoholics Anonymous, Overeaters Anonymous, Alanon, ACA, etc. Questions will also be answered. Please include a phone number in case of trouble establishing an e-mail path.

30something

Contact: 30something-request@samadams.princeton.edu (Tom Reingold)

Purpose: Discussion of the TV show by the same name, including actors, episodes, plots, characters, etc.

386users

Contact: 386users-request@udel.edu (William Davidsen, Jr.)

Purpose: Topics are 80386 based computers, and all hardware and software which is either 386-specific or which has special interest on the 386.

3d

Contact: 3d-request@bfmny0.bfm.com (Tom Neff)

Purpose: Discussion of 3-D (stereo) photography. General info, hints, experiences, equipment, techniques, and stereo "happenings." Anyone interested is welcome to join.

ABC

Contact: abc-list-request@cwi.nl (Steven Pemberton)

Purpose: Discussion of the ABC Programming Language and its implementations. Information on ABC is available in "The ABC

Programmer's Handbook", Leo Geurts et.al, Prentice Hall 1990; "An Alternative Simple Language and Environment for PCs", Steven Pemberton, IEEE Software, Vol. 4, No. 1, January 1987, pp. 56-64.; by ftp from mcsun.eu.net, file programming/languages/abc/abc.intro; and by mail-server from info-server@hp4nl.nluug.nl: send two-line message: "request programming/languages/abc" "topic abc.intro".

act-up

Contact: act-up-request@world.std.com (Lenard Diggins)

Purpose: act-up was set up for the discussion of the work being done by the various act-up chapters worldwide, to announce events, to exchange ideas related to aids activism, and, more broadly, to discuss the politics of AIDS and health care.

adoption

Contact: adoption-request@think.com

Purpose: The list's charter to is to discuss anything and everything connected with adoption

aeronautics

Contact: aeronautics-request@rascal.ics.utexas.edu

Purpose: The "aeronautics" mailing list will be a moderated version of the sci.aeronautics newsgroup, and as such will deal with various technical aspects of aviation, such as human factors, airliner operations, avionics, and aerodynamics. It will be a one-way feed (sci.aeronautics -> mailing list), unless sufficient demand requires that it go in the opposite direction.

agenda-users

Contact: agenda-users@newcastle.ac.uk

Purpose: A new mailing list for users of the Microwriter Agenda handheld computer.

aids

Contact: aids-request@cs.ucla.edu (Daniel R. Greening)

Purpose: A distribution list for people who can't read sci.med.aids. Covers predominately medical issues of AIDS. Some discussion of political and social issues. Postings to AIDSNEWS and Health InfoCom News mailing lists are also carried.

Unlike info-aids, postings to aids@cs.ucla.edu are NON-confidential. The average number of postings to aids is about 2 per day. The average size of articles is very large (statistics, news summaries, etc.) sci.med.aids and aids@cs.ucla.edu are moderated. (see also "info-aids" mailing

list)

AIDS-stat

Contact: aids-stat-request@wubios.wustl.edu (David Dodell)

Purpose: AIDS-STAT is a moderated mailing list whose sole purpose is for the distribution of AIDS statistics from various agencies. The prime information being distributed will be the Center for Disease Control's monthly AIDS Surveillance Report.

algeria-net

Contact: belk@pyr.gatech.edu (Nasr Belkheir)

Purpose: a forum for discussion about political, cultural aspects of Algerian society.

alife

Contact: alife-request@iuvax.cs.indiana.edu (Elisabeth Freeman, Eric Freeman, Marek Lugowski)

Purpose: The alife mailing list is for communications regarding artificial life, a formative interdisciplinary field involving computer science, the natural sciences, mathematics, medicine and others. The recent book _Artificial Life_, Christopher Langton, ed., Addison Wesley, 1989 introduces the scope of artificial life as a field of study. Alife was chartered in February 1990 at the Second Artificial Life Workshop, held in Santa Fe & organized by the Center for Nonlinear Studies at the Los Alamos National Laboratory and the Santa Fe Institute. The list is intended primarily for low-volume, high-content scientific correspondence and as a publically accessible forum for the interested members of the public. Membership as of July 1990 includes over 1,200 addresses on four continents. There is an FTP-accessible archives/repository of past traffic, software and papers. The list is maintained by the Artificial Life Research Group, Computer Science Department, Lindley Hall 101, Indiana University Bloomington, IN 47405. There are conditions on redistribution of the list in order to minimize any misunderstanding or exaggeration concerning this new area of study.

Alspa

Contact: alspa-users-request@ssyx.ucsc.edu (Brad Allen)

Purpose: Discussion by owners/users of the CP/M machines

made by (now defunct) Alspa Computer, Inc.

alternates

Contact: alternates-request@qiclab.scn.rain.com

Purpose: Mail.alternates is a mail list for people who advocate, and/or practice an open sexual lifestyle. Its members are

primarily bisexual men and women, and their SO's. Mail.alternates is intended as a forum, and support group for adult men and women who espouse their freedom of choice and imagination in human sexual relations, no matter what their orientaion. Those who are offended by frank, and uninhibited discussions relating to sexual issues should not subscribe.

Moderator/Editor: Hank Buurman <hanker@binbi.roy.or.us>

animal-rights

Contact: animal-rights-request@cs.odu.edu (Chip Roberson)

Purpose: An unmoderated list for the discussion of Animal Rights. Peter Singer's book "Animal Liberation" proposes a "New Ethics for our Treatment of Animals" and many activist groups, such as PETA (People for the Ethical Treatment of Animals), regard this as the "Bible of the Animal Rights movement". Consumers and researches alike are facing new questions concerning the human animals' treatment of the rest of the animal kingdom. The purpose of this list is to provide students, researchers, and activists, a forum for discussing issues like:

Animal Rights Animal Liberation

Consumer Product Testing Cruelty-free products

Vivisection/Dissection Medical Testing

Animals in Laboratories Research using Animals Hunting/Trapping/Fishing Animals in Entertainment

Factory Farming Fur

Ecology Environmental Protection
Vegetarianism Vegan lifestyles

Christian Perspectives

anneal

Contact: anneal-request@cs.ucla.edu (Daniel R. Greening)

Purpose: Discussion of simulated annealing techniques and analysis, as well as other related issues (stochastic optimization, Boltzmann machines, metricity of NP-complete move spaces, etc).

Membership is restricted to those doing active research in simulated annealing or related areas. Current membership is international, and about half of the members are published authors. The list itself is unmoderated.

antiques

Contact: antiques-request@swbatl.sbc.com (Tom Adams)

Purpose: The antiques mailing list is for discussions on general antiques and collectables. Discussions on value, history, repair or general discussions about antiques are welcome. Although

for-sale ads are not encouraged, they are not prohibited. There is a mailing list specifically devoted to antique-radio topics, so radio collectors should probally direct their attention to that list. This group is set up as a mail reflector.

antique-radios

Contact: antique-radio-request@swbatl.sbc.com (Tom Adams)

Purpose: The antique-radio mailing list is for discussions on antique radio, television and vintage electronics. Discussions on value, history, repair or general discussions about early radio are welcome, as are discussions on books and magazines related to this topic. Given the difficulty in finding early radio parts, wanted and for-sale ads are encouraged in this forum. This group is set up as a mail reflector.

AoN

Contact: aon-request@polyslo.calpoly.edu (Cliff Tuel)

Purpose: The Art of Noise Mailing List is a forum for discussing anything about the British pop group Art of Noise, or any solo works by the band's members. A discography is available, as are several other files of interest.

argentina

Contact: argentina-request@ois.db.toronto.edu (Carlos G. Mendioroz)

Purpose: Mailing list for general discussion and information. By joining you can learn about how to make those patties (empanadas) that you miss so much, you can discuss on how to 'cebar un buen mate', and of course, on how to solve Argentina's most outstanding problems. We don't have a regular news service yet, but some members send every now and then a briefing. To join send name, e-mail, phone number, address, and topics of interest. List contents are primarily in Spanish.

argproc

Contact: rochester!srs!argproc-request (Dan Kegel)

Purpose: discussion about command-line processors like getopt().

att-pc+

Contact: bill@ssbn.wlk.com --or--

...!{att,cs.utexas.edu,sun!daver}!ssbn!bill (Bill Kennedy)

Purpose: For people interested in the AT&T PC 63xx series of systems. Sub-lists are maintained for MS-DOS-only and Simul-Task mailings as well as the full list for items of general interest. Membership must be requested and mail path verification is required before membership is granted.

autox

Contact: autox-request@hoosier.utah.edu

Purpose: AUTO-X is a list for those who are involved in/interested in auto-crossing. Many of the list's members are SCCA(Sports Car Club of America).

backstreets

Contact: backstreets-request@virginia.edu (Marc Rouleau)

Purpose: Our purpose is to discuss any and all issues likely to be of interest to people who enjoy Bruce Springsteen's music.

ballroom

Contact: ballroom-request@athena.mit.edu (Shahrukh Merchant c/o MIT Ballroom Dance Club)

Purpose: Discussion of any aspect of Ballroom dancing. For instance: Places to dance, announcement of special events (e.g., inter- university competitions), exchange of information about clubs, ballroom dance music, discussion of dances, steps, etc.

Anyone may join; please send ALL of the following information: (1) Full name (2) Internet-compatible e-mail address (3) Affiliation, if any, with any ballroom dance organization or group (4) ZIP or postal code, and country if other than U.S. (5) Whether you have access to Netnews (Yes/No/Don't know/Yes but don't use).

bears

Contact: bears-request@spdcc.COM (Steve Dyer & Brian Gollum) ...!{harvard,ima,linus,mirror}!spdcc!bears-request

Purpose: Mail.bears is a mailing list in digest format for gay and bisexual men who are bears themselves and for those who enjoy the company of bears. The exact definition of a "bear" seems to be a personal one, but it encompasses men who are variously cuddly, furry, perhaps stocky, or bearded. Mail.bears is designed to be a forum to bring together folks with similar interests for conversation, friendship and sharing of experiences. The tone of mail.bears will be determined by its members, but people uncomfortable with discussing sexually explicit topics via electronic mail should not subscribe.

BETA

Contact: usergroup-request@mjolner.dk (Elmer Soerensen Sandvad)

Purpose: A discussion forum for BETA users. BETA is a modern object-oriented programming language with: Powerful abstraction mechanisms including class, subclass, virtual class, class variable, procedure, subprocedure, virtual procedure, procedure variable, coroutine, subcoroutine, virtual coroutine, coroutine

variable, and many more, all unified to the ultimate abstraction mechanism: the pattern. Other features include general block structure, coroutines, concurrency, strong typing, part objects, separate objects, and class-less objects.

Between-the-lines

Contact: ez000018@bullwinkle.ucdavis.edu (Matthew Jung) --or--lee@physics.ubc.ca (Henry Lee)

Purpose: Debbie Gibson fans & discussion.

big-DB

Contact: big-DB@midway.uchicago.EDU (Fareed Asad-Harooni)

Purpose: Discussions pertaining to large data bases (generally greater than 1 million records) and large data base management systems such as IMS, DB2, and CCA's Model/204. Anyone having interests in large data base issues is welcome.

biosym

Contact: dibug-request@avogadro.barnard.columbia.edu (Peter Shenkin)

Purpose: For users of Biosym Technologies software. This includes the products InsightII, Discover, Dmol, Homology, Delphi, and Polymer. The list is not run by Biosym.

blackbird

Contact: skunk-works-request@orchestra.ecn.purdue.edu

Purpose: Discuss Lockheed special project planes, particular the Blackbird (A-12, YF-12 and SR-71) and U-2 programs.

BMW

Contact: bmw-request@sol.crd.ge.com (Richard Welty)

Purpose: discussion of cars made by BMW.

brasil

Contact: bras-net-request@cs.ucla.edu (B. R. Araujo Neto)

Purpose: Mailing list for general discussion and information. To join send name, e-mail, phone number, address, and topics of interest. Portuguese is the main language of discussion.

brass

Contact: brass-request@geomag.gly.fsu.edu (Ted Zateslo)

Purpose: A discussion group for people interested in brass musical performance and related topics, especially small musical ensembles of all kinds.

bread

Contact: bread-request@onion.rain.com (Jeff Beadles)

Purpose: Discussion, recipes, and talk about home bread-making machines.

british-cars

Contact: british-cars-request@encore.com (Dale C. Cook)

Purpose: To discuss any and all aspects of owning, showing, repairing, driving, etc. British automobiles.

ca-firearms

Contact: chan@portal.com (ca-firearms-request@portal.com)

Purpose: Announcement and discussion of California firearms legislation and laws. The list is not moderated and membership is open to anyone.

cabot

Contact: cabot-request@sol.crd.ge.com (Richard Welty)

Purpose: official mailing list of the New York State Institute for Sebastian Cabot Studies.

Cards

Contact: cards-request@tanstaafl.uchicago.edu (Keane Arase)

Purpose: For people interested in collection, speculation and investing in baseball, football, basketball, hockey and other trading cards and/or memoribilia. Discussion and want/sell lists are welcome. Open to anyone.

cavers

Contact: cavers-request@m2c.org -orharvard!m2c!cavers-request (John D. Sutter)

Purpose: Information resource and forum for all interested in exploring caves. To join, send a note to the above address including your geographical location as well as e-mail address; details of caving experience and locations where you've caved; NSS number if you have one; and any other information that might be useful.

cdforum

Contact: uunet!samsung!wizvax!cdforum-request (Stephanie P. Gilgut)

Purpose: To provide support/discuss/share experiences about gender related issues; Crossdressing, Transvestism, Transsexualism, etc. This list is in Digest Format.

chalkhills

Contact: chalkhills-request@presto.ig.com (John M. Relph)

Purpose: Chalkhills is a mailing list for the discussion of the music and records of XTC (the band). Chalkhills is moderated and is distributed in a digest format.

chem-eng

Contact: trayms@cc.curtin.edu.au (Dr. Martyn Ray)

Purpose: An electronic newsletter on chemical engineering.

Chem-talk

Contact: Dr. Manus Monroe, Chemistry Department, Marin Community College ...!{ames,cbosgd}!pacbell!unicom!manus

Purpose: As chemists, dialogue and conversation with other scientists are essential to stimulating or provoking new ideas. As teachers and researchers, we can find the demands of our profession extensive, which may lead to a reduction in our ability to keep abreast of new data and changes in theories. Sometimes, conversation helps to clarify articles, illuminate new perceptions of theories, and sustain us through our precarious journey in chemistry. A solution to this problem or concern is the creation of efficient communication network using this mailing list.

christian

Contact: ames!elroy!grian!mailjc-request mailjc-request@grian.cps.altadena.ca.us

Purpose: To provide a non-hostile environment for discussion among christians. Non-christians may join the list and "listen-in", but full blown debates between Christians and non-Christians are best carried out in talk.religion.misc or soc.religion.christian.

C-IBM-370

Purpose: The C on IBM mainframes mailing list is a place to discuss aspects of using the C programming language on s/370-architecture computers -- especially under IBM's operating systems for that environment.

cisco

Contact: cisco-request@spot.colorado.edu (David Wood)

Purpose: This list is for discussion of the network products from Cisco Systems, Inc; primarily the AGS gateway, but also the ASM terminal multiplexor and any other relevant products. Discussions

about operation, problems, features, topology, configuration, protocols, routing, loading, serving, etc are all encouraged. Other topics include vendor relations, new product announcements, availability of fixes and new features, and discussion of new requirements and desirables.

clu

Purpose: Exchange of CLU software and technical discussion of related topics.

CoCo

Contact: pecampbe@mtus5.BITNET (Paul E. Campbell)

Purpose: Discussion related to the Tandy Color Computer (any model), OS-9 Operating System, and any other topics relating to the "CoCo", as this computer is affectionately known.

Anyone wishing to be on the list should send me mail. UUCP users, PLEASE NOTE: I need a nearby Internet or BITNET node to get things through to you reliably, so please send me a path in the form: zeus!yourcomp!yourid@sun.COM

comix

Contact: comix-request@world.std.com (Elizabeth Lear Newman)

Purpose: Intended for talking about non-mainstream and independent comic books. We generally don't talk about superheroes much, and we don't talk about Marvel Mutants at all.

commune

Contact: commune-request@stealth.acf.nyu.edu (Dan Bernstein)

Purpose: To discuss the COMMUNE protocol, a TELNET replacement. The list is a mail reflector, commune-list@stealth.acf.nyu.edu.

compress

Contact: {decvax,ucbvax}!vax135!petsd!joe

Purpose: discussions about file compression, especially Lempel-Ziv algorithms.

cryonics

Contact: ...att!whscad1!kqb -or- kqb@whscad1.att.com (Kevin Q. Brown)

Purpose: Cryonic suspension is an experimental procedure whereby patients who can no longer be kept alive with today's medical abilities are preserved at low temperatures for treatment in the future. This list is a forum for topics related to cryonics,

which include biochemistry of memory, low temperature biology, legal status of cryonics and cryonically suspended people, nanotechnology and cell repair machines, philosophy of identity, mass media coverage of cryonics, new research and publications, conferences, and local cryonics group meetings.

ctree

Contact: alberta!oha!ctree-request (Tony Olekshy)

Purpose: The C-Tree mailing list provides a forum for the discussion of FairCom's C-Tree, R-Tree, and D-Tree products. This mailing list is not associated with FairCom. We have over three dozen members, amd cover virtually all hardware and operating system ports.

CUSSNET (Computer Users in the Social Sciences)
Contact: cussnet-request@stjhmc.fidonet.org

{gatech,ames,rutgers}!ncar!noao!asuvax!stjhmc!cussnet-request

Purpose: CUSSNET (Computer Users in the Social Sciences) is a network of students, faculty, and professionals working in a variety of social science/social service settings and who have concerns with practice, education, ethics, computerization, and career advancement, to name a few. Many of the participants are students of social work, practicing social workers or social work educators; however, anyone with an interest in the human services/social sciences/social services areas is welcome to participate. Recent topics have included ethics, computerization concerns, social work education topics, job announcements, and adaptive technology topics.

cyberpunkRPG

Contact: cyberrpg@eklektik.pgh.pa.us (Steven J. Owens)

Purpose: The cyberpunk mailing list is primarly for the discussion of cyberpunk role-playing games. The discussion is not limited to any game system. Subjects of a peripheral nature are welcome as long as they don't get out of hand. There is one one rule on this mailing list: the moderator gets to add new rules at will.

CZ

Contact: cz-request@pram.cs.ucla.edu (Ted Kim)

Purpose: The purpose of the "The Convergence Zone" (or CZ for short) is to discuss the Harpoon naval wargame series and related topics. This includes Harpoon, Captain's Edition Harpoon, Computer Harpoon, Harpoon SITREP and various supplements for print and computer versions. Naval topics are discussed in so far as they are related to the game or provide useful background. Discussion

is moderated. CZ is packaged in a digest format. Listeners as well as contributors are welcome.

decstation-managers

Contact: decstation-managers-request@ornl.gov

Purpose: Fast-turnaround troubleshooting tool for managers of RISC DECstations.

derby

Contact: derby-request@mips.com (John Wilkes)

Purpose: To discuss various aspects and strategies of Horse Racing, primarily dealing with, but not limited to, handicapping. Anyone is free to join.

DGRD

Contact: taylor@limbo.intuitive.com (Dave Taylor)

Purpose: The digital games review digest is devoted to computer and video game reviews. We're interested in just about any games that run on computers, including IBM PC, Atari, Amiga, Macintosh, Apple II and Unix computers, as well as video games for the Nintendo, Sega, NEC, Atari, and so on. We also cover games for the portable market (e.g. the Atari Lynx and Nintendo GameBoy).

This is a *REVIEWS ONLY* mailing list, with all submissions edited to fit into a common and consistent format. Discussion of the relative merits of different gaming computers, technical discussion of resolution required to display 3D graphics, and general flaming and hostility will be left to the many different forums appropriate for that type of discussion.

dirt-users

Contact: dirt-users-request@ukc.ac.uk

Purpose: Dirt is an X11-based UIMS.

Donosy

Contact: przemek@ndcvx.cc.nd.edu (Przemek Klosowski)

Purpose: Distribution of a news bulletin from Poland. English and Polish versions are both avaiable.

drwho-spoilers

Contact: terminus!nyssa (James Armstrong, Jr.)

Purpose: Branched off of rec.arts.drwho is a list for "Spoilers", which is intended to distribute news about upcoming seasons and discussion on recently released episodes and keep it away from the eyes of people who would rather not know until they see the shows

themselves.

*** This group is currently inactive. ***

Dual-Personalities

Contact: dual-personalities-request@darwin.uucp

Purpose: Discussion, maintenance/survival tips, and commercial offerings for the System/83 UNIX box made by the now-defunct DUAL Systems Corp of Berkeley, as well as similar machines using the IEEE-696 bus (such as the CompuPro 8/16E with Root/Unisoft UNIX).

eastender

Contact: eastender@karazm.math.uh.edu

Purpose: Discussion of the BBC serial "EastEnders" as it is broadcast within the US. UK'ers are invited, but be warned we're about two years behind the UK series.

eclipse

Contact: eclipse-request@beach.cis.ufl.edu (John C. Orthoefer)

Purpose: Info and commentary on the musical group Pink Floyd as well as other projects members of the group have been involved with.

ecuador

Contact: ivan@neptj.ncsu.edu (G. Ivan Maldonado)

Purpose: a mailing list for general discussions and information about Ecuador and its people.

edge

Contact: bowers@elxsi.dfrf.nasa.gov (Al Bowers)

Purpose: A mailing list for enthusiasts of edged weapons. This list is presented to allow a forum of disscussion related to edged weapons. Their uses, constructions and origins.

empire-list

Contact: empire-list-request@bbn.com

Purpose: Discussion of design and implementation issues of BSD Empire among authors and interested parties.

emtex-user

Contact: emtex@methan.chemie.fu-berlin.de (Vera Heinau & Heiko Schlichting)

or: emtex@fub.uucp

Conversation language: German! Purpose: Informationen ueber das Programm emTeX, die zur Zeit beste Implementation von TeX auf MS-DOS und OS2 Rechner. Informationen ueber neue Updates, Bugs und Bezugsquellen.

Episcopal

Contact: dragon!digest (Cindy Smith)

Purpose: Episcopal Digest is a forum for Episcopalians as well as members of the worldwide Anglican Catholic Communion who wish to discuss matters pertaining to Christianity in general, Episcopal Church matters in particular, and related topics. Discussions on ecumenism are encouraged.

esperanto

Contact: esperanto-request@rand.org (Mike Urban)

Purpose: This list is a forum for people interested in the neutral international language Esperanto. Discussions about the language itself, the Esperanto movement, publications, and news are encouraged; of course, discussion *in* the language itself are especially encouraged, although English translations may be advisable when the material is of interest to beginners or non-Esperantists.

ethology

Contact: saarikko@cc.helsinki.fi (Jarmo Saarikko)

Purpose: An unmoderated mailing list for the discussion of animal behaviour and behavioural ecology. Possible topics could be e.g. new or controversial theories, new research methods, and equipment. Announcements of books, papers, conferences, new software for behavioural analysis etc., with possible experiences, are also encouraged.

euro-moto

Contact: bowers@elxsi.dfrf.nasa.gov (Al Bowers)
or
euro-moto@skipper.dfrf.nasa.gov (Al Bowers)

Purpose: Topics covering all aspects of European motorcycles, for enthusiasts of pavement, dirt, classic, modern, rare or common European motorcycles.

f-mac

Contact: brunyan%utmem2.bitnet@cunyvm.cuny.edu (Bill Runyan)

Purpose: Information on commentary on the musical group Fleetwood Mac as well as any work or projects that any of the members have been involved with. Such as the solo work of singer Stevie Nicks.

feminism-digest

Contact: feminism-digest@ncar.ucar.edu (Cindy Tittle Moore)

Purpose: This is actually a digest version of soc.feminism. It is intended for those who have difficulty getting soc.feminism or who prefer to read it all at once or whatever.

feminists

Contact: collins@hplabs.hp.com (Patricia Collins)

Purpose: The feminist mailing list is intended to provide a forum for discussion of issues of interest to women, in a friendly atmosphere. The basic tenets of feminism and the day-to-day experiences of women do not have to be explained or defended. Men and women can join, but everyone requesting to be added to the mailing list MUST provide the moderator with: 1) a full name; 2) a complete uucp path to a well-known host or a fully specified Internet address; 3) the correspondent's gender (for records and statistics only). NO exceptions.

ferrets

Contact: ferret-request@eci386.uucp (Chris Lewis)
 {utzoo,utai,attcan}!lsuc!gate!eci386!ferret-request

Purpose: This is a mailing list for people who have or are merely interested in ferrets (Mustela Furo). Discussions are welcome on any subject relating to ferrets -- suitability as pets, health information, funny ferret stories etc.

Fiction-Writers

Contact: writers-request@studguppy.lanl.gov (Doug Roberts)

Purpose: The Fiction Writers Group exists for two purposes:

To give people interested in writing fiction professionally a support group of peers for where information can be shared and discussions of the task of writing can be carried on.

To create an environment where Works In Progress can be passed around and criticized so that the author can find the weak spots and polish the manuscript into a salable work.

The group has handled mostly Science Fiction, Fantasy, and related genres, but is not restricted to them. Membership is open to anyone who has in interest in writing fiction regardless of previous experience or published/unpublished status.

Members must be prepared to regularly contribute either by critiquing the work of others or presenting work for critique.

firearms

Contact: osu-cis!firearms-request --or-firearms-request@tut.cis.ohio-state.edu Purpose: The mailing list firearms has been created to provide an environment in which sportsmen can discuss issues of concern to them. Topics include but are not limited to hunting, firearms safety, legal issues, reloading tips, maintenance suggestions, target shooting, and dissemination of general info. Anyone is welcome to join -- note that we do NOT intend to discuss the merits of gun control.

flamingo

Contact: flamingo-request@esd.sgi.com (Laura Beatty) (reflector)
 flamingo-request@ddsw1.mcs.com (David Tamkin) (digests)

Purpose: The list is for discussion among fans of the series "Parker Lewis Can't Lose" on the Fox television network. It is unmoderated. It is available both as a mail reflector and as a digest. The two formats distribute the same material, so the choice is strictly a matter of the subscriber's preference.

flashlife

Contact: flashlife-request@amd.com (Carl Rigney)

A mailing list for GMs of Shadowrun and other cyberpunk roleplaying games to discuss rules, scenarios, ask questions, make up answers, and similar fasfax.

Flat-Fields

Contact: Flat-Fields-Request@ucscb.ucsc.edu

Purpose: Discussion of Bauhaus and the groups that came out of it. Also Gothic/Death Rock in general.

folk-dancing

Contact: tjw@unix.cis.pitt.edu (Terry J. Wood)
 {allegra,bellcore,cadre}!pitt!unix.cis.pitt.edu!tjw
 tjw@pittvms.bitnet

Purpose: Any discussion of FOLK dancing. Areas of dance would include, but not be limited to: international, contra, square, western square morris, cajun, and barn dancing, etc.

Please feel free to discuss such things as touring groups, artists, camps, workshops, styling, equipment, recordings, and so on. This mailing list also welcomes queries about where to find dance groups and how to get started dancing.

Please note that the Folk Dancing Mailing List (FDML) operates in conjunction with the USENET newsgroup Rec.folk-dancing. Material in Rec.folk-dancing appears in the FDML. This mailing list is primarily for people who can not (or do not wish to) receive USENET.

When subscribing to the FDML, please include several computer mail addresses AND a postal mail address (or phone number) as a last resort.

fourd

Contact: fourd-request@castle.ed.ac.uk (Paul Crowley)

Purpose: Higher dimensional visualisation.

framers

Contact uunet!apctrc!drd!framers-request
 framers-request@drd.com (Mark Lawrence)

Purpose: A users forum for sharing of experiences and information about the framemaker desktop publishing package from Frame Technologies. The framemaker package is mainly prevalent on Suns but those using the DECWriter product under DECWindows may notice some _amazing_ similarities between the two and may have interest in this list.

fsuucp

Contact: fsuucp-request@polyslo.calpoly.edu (Christopher J. Ambler)

Purpose: The FSUUCP mailing list is for the discussion, bug hunting, feature proposing, and announcements of the availability and release dates of FSUUCP, an MSDOS UUCP/mail/news package. FSUUCP is shareware, and includes uucico/uuxqt (with support for rmail and rnews (single, batched and compressed batch)), as well as readnews, postnews, mail, expire, uuq, uusnap, uulog, and a host of utilities.

funky-music

Contact: funky-music-request@apollo.lap.upenn.edu (George Zipperlen) -or-...!rutgers!super.upenn.edu!apollo.lap.upenn.edu!funky-music-request

Purpose: The funky-music mailing list is for the discussion of funk music, as well as rap, hip-hop, soul, r&b, and related varieties. Discussions of zydeco, reggae, salsa, soca, and similar gutsy street music are also welcome.

Funk music is based on the rhythmic innovations pioneered by James Brown. Other notable artists in the genre are Parliament, Funkadelic, War, Earth Wind and Fire, the Meters, and Mandrill.

Funky music has a dance-able beat to it, a soulful feel, and an underlying intelligence. All the varieties of music mentioned above, are funky.

gamedesign-philo

Contact: game-design-request@cash.ucsc.edu (Aryeh Friedman)

Purpose: The pupose of this list is to discuse the ideas and techniques of game-design. It is not intended to be a place for flames, source code, or other junk mail type messages.

The list is not a part or have any connection to game-designsr run by Scott D. Yelich. Also as most people on the list belong to both so crossposting is discourged, but allowed with the moderator's approval of the list being crossposted to.

The kind of things I like to see are:

- * New concepts, rules wise, in various types of games
- * Food for thought
- * Points and tips on playtesting
- * etc.

glove-list

Contact: glove-list-request@karazm.math.uh.eduJ (Eric Townsend)

Purpose: Discussion of the Nintendo PowerGlove, a > \$100 dataglove.

qnu-manual

Contact:

internet: gnu-manual-request@a.cs.uiuc.edu

usenet: uiucdcs!gnu-manual

Purpose: "gnu-manual" members are volunteers who write, proofread, and comment on documents for a GNU Emacs Lisp programmers' manual.

handicap

Contact: wtm@bunker.shel.isc-br.com

Purpose: The Handicap Digest provides an information/discussion exchange for issues dealing with the physically/mentally handicapped. Topics include, but are not limited to: medical, education, legal, technological aids and the handicapped in society.

Note: The articles from the Handicap Digest are also posted in the Usenet Newsgroup, "misc.handicap".

hang-gliding

Contact: hang-gliding@midway.uchicago.EDU (Fareed Asad-Harooni)

Purpose: Topics covering all aspects of hang-gliding and ballooning, for ultra-light and lighter-than-air enthusiasts.

A second list may be joined by mailing to hang-gliding@virginia.edu (Galen Hekhuis).

health-ed

Contact: health-ed-request@stjhmc.fidonet.org (David Dodell)

Purpose: HEALTH-ED is a conference area dealing with Health Education. Any topic dealing with ideas, problems, or solutions is acceptable. The area is intended for use by health educators and education coordinators.

hey-joe

Contact: hey-joe-request@ms.uky.edu (Joel Abbott)

Purpose: Discussion and worship of Jimi Hendrix and his music. Although Jimi has been dead for about 2 decades, we feel that his music is still worthy to be recognized. Prerequisite to joining: appreciation for his music.

homebrew

Contact: homebrew-request%hpfcmr@hplabs.hp.com
 or ...!hplabs!hpfcmr!homebrew-request (Rob Gardner)

Purpose: Forum on Beer, homebrewing, and related issues. Though mainly intended for discussion of beer making, also welcome are discussions on making cider, mead, wine, or any other fermented (but not distilled) beverage. Beginners are welcomed as well as experienced brewers.

honda

Contact: honda-request@msrc.sunysb.edu (Rob Malouf)

Purpose: Discussion of Honda and Acura automobiles.

horse

Purpose: Discussion of things equestrian. Horse enthusiasts of all disciplines and levels of experience are welcome. Articles are distributed periodically in digest format, and also appear individually in the Usenet newsgroup "rec.equestrian".

hyperami

Contact: ruslan@ecsvax.uncecs.edu (Robin LaPasha)

Purpose: Discussion of Amiga computer hypermedia/multimedia products and applications.

IBDlist

Contact: IBDlist-request%mvac23@udel.edu (Thomas Lapp) --or--...!udel!mvac23!IBDlist-request

Purpose: IBDlist is a moderated mailing list which discusses all aspects of Inflammatory Bowel Diseases, with particular emphasis

on Crohn's disease and Ulcerative Colitis. Anyone with an interest in these diseases, whether direct or indirect is welcome. This list will also act as a clearinghouse for information and discussion of current treatments, research, and other information related to IBDs. This list is open to any interested party and is not restricted to those with a direct link to IBD.

iclinfo

Contact: {obdient,tfd}!tons61!iclinfo

Purpose: To update and relay information regarding the CCI/ICL processors. Including information on product updates, product problems, service problems and information, system options, and information on CCI/ICL from "off-line" sources.....(i.e. Inside "scoops" direct from "hidden" CCI/ICL sources.

immune

Contact: immune-request@weber.ucsd.edu (Cyndi Norman)

Purpose: A support group for people with immune-system breakdowns (and their symptoms) such as Chronic Fatigue Syndrome, Lupus, Candida, Hypoglycemia, Multiple Allergies, Learning Disabilities, etc, and their SO's, medical caretakers, etc. The group is unmoderated and open to anyone anywhere in the world (no arguments about whether or not these disabilities exist).

impulse

Contact: impulse-users-request@j.cc.purdue.edu (Kevin Braunsdorf)

Purpose: A low-volume list for users of the LPC Mpulse line of computers. The moderator does filter and journalize submissions.

info-aids

Contact: info-aids@rainbow.UUCP --or-{pacbell,apple,hoptoad,ucbvax}!well!rainbow!info-aids (Ken Davis)

Purpose: to act as a clearinghouse for information, and discussion about AIDS, including alternative treatments, political implications, etc. Exchanges files with AIDNEWS@RUTVM1.BITNET. Open to anyone with the time and inclination to participate. Mailing list will be confidential and known only to the members. Anonymous postings will be accepted. (See also "aids" mailing list)

info-altos

Contact: info-altos-request@tiamat.fsc.com (Jim O'Connor & Mike Johnson)

Purpose: Information and discussion about Altos computers.

info-ccc

Contact: uunet!xurilka!info-ccc-request (Luigi Perrotta)

Purpose: The info-ccc mailing list will be devoted to the Concurrent C and Concurrent C++ programming languages. However, discussions can be anything relevant to concurrent programming.

info-encore

Contact: info-encore-request@cs-gw.D.UMN.EDU --or-info-encore-request@umnd-cs.UUCP (Dan Burrows)

Purpose: Mailing list for discussion of issues involving hardware and software issues of Encore computers and ethernet terminal servers.

This mailing list is also gatewayed into the inet list, comp.sys.encore

info-futures

Contact: harvard!bu-cs!info-futures-request -or-info-futures-request@cs.bu.edu

Purpose: To provide a speculative forum for analyzing current and likely events in technology as they will affect our near future in computing and related areas.

info-gnu

Contact:

info-gnu-request@prep.ai.mit.edu --or-ucbvax!prep.ai.mit.edu!info-gnu-request

Purpose: to distribute progress reports on the GNU Project, headed by Richard Stallman, and to ask members for various kinds of help. The list is gated both ways with the alternative newsgroup "gnu.announce," and is filtered (weakly moderated) by Leonard H. Tower Jr. GNU, which stands for Gnu's Not Unix, is the name for a complete Unix-compatible software system whose sources can be given away free to everyone. Major parts have already been written; major parts still remain undone. Project GNU has additional mailing lists to distribute information about specific GNU programs, and to report bugs in them. Contact us at the above address for details.

info-high-audio

Contact: info-high-audio-request@csd4.csd.uwm.edu (Thomas Krueger)

Purpose: This list is for the exchange of subjective comments about high end audio equipment and modifications performed to high end pieces. Techniques used to modify equipment, especially, but not limited to, vacuum tube electronics are exchanged. Some comments may be subjective or intuitive and may not yet have a measurable basis. Other topics of discussion include turntables, arms and cartridges; preamplifiers, headamps and cartridge matching; speakers, amplifiers and matching; placement of speakers, and room

treatments. Any comments that prevent an open exchange of ideas and techniques are not encouraged.

Archives of projects will be maintained on csd4.csd.uwm.edu and available via anonymous ftp. Info-High-Audio is bi-directionally gatewayed with the USENET newsgroup rec.audio.high-end.

info-ingres

Contact: info-ingres-request@math.ams.com

Purpose: To discuss the commercial version of Ingres.

info-prime

Contact: Info-Prime-Subscribe@List.Kean.EDU (automated subscription)
Info-Prime-Request@List.Kean.EDU

Purpose: INFO-PRIME is the discussion group/mailing list for users and administrators of Prime Computer equipment: 50-series (PRIMOS) and EXL series (Unix).

info-solbourne

Contact: info-solbourne-request@acsu.buffalo.edu (Paul Graham)

Purpose: Discussions & info about Solbourne computers.

info-sparc

Contact: info-sparc-request@nominil.lonestar.org (Mark Linimon)

Purpose: Technical information relating to the SPARC architecture that is too specific for the general Usenet audience of comp.sys.sun, comp.arch, and/or comp.newprod.

irclist

Contact: jto@tolsun.oulu.fi

Purpose: discussion about the Internet Relay Chat program.

info-tahoe

Contact: info-tahoe-request@uwm.edu --or-uwm!info-tahoe-request (Jim Lowe)

Purpose: Discussions pertaining to the Tahoe type of CPU. These include the CCI Power 6/32, the Harris HCX/7, and the Sperry 7000 series computers.

The info-tahoe mailing list is set up as a mail reflector.

This mailing list is also gatewayed into the inet list, comp.sys.tahoe

info-vm

Contact: info-vm-request@cs.odu.edu (Kyle Jones, and others)

Purpose: Discussion and information exchange about the VM mail reader, which runs under GNU Emacs.

info-vw

Contact: info-vw-request@ames.arc.nasa.gov

Purpose: This is a list for those who own, or are intersted in, VolksWagons. Both air and water-cooled models are discussed.

informix-list

Contact: informix-list-request@rmy.emory.edu (Walt Hultgren)

Purpose: An unmoderated list for the discussion of Informix software and related subjects. Topics include all Informix offerings, from C-ISAM to WingZ, plus third-party products. Membership is open to anyone, including end-users, vendors and employees of Informix Software, Inc. An optional gateway service of Informix-related articles from comp.databases is offered. Not affiliated with Informix Software, Inc.

ipsc-managers

Contact: ipsc-managers-request@karazm.math.uh.edu (J Eric Townsend)

Purpose: Discussion of administrating the Intel iPSC line of parallel computers.

islam

Contact: islam-request@eecs.nwu.edu -or{oddjob,laidbak,chinet}!nucsrl!islam-request (Naim Abdullah)

Purpose: To discuss the basic tenets of Islam and interpretations of the Quran. The list is not for discussing the validity of Islam or any political issues.

italian-cars

Purpose: discussion of italian-made automobiles

iti151

Purpose: For users of Imaging Technology's series 150 and 151 image processing systems and ITEX151 software. The goal is to share algorithms, code, tricks, pitfalls, advice, etc. in an effort to decrease development time and increase functionality for the users of these systems. (Also, despite their good support, we customers

may want to gang up on ITI someday!!)

J-Pop:

Contact: jpop-request@wystan.bsd.uchicago.edu (Shin Kurokawa)

The purpose of this group is mainly for discussing contemporary Japanese pop/rock music. We'll have reviews and comments on the latest (and the old) "Hits", singles, albums, etc., as well as on the various works that each of us may already have or acquire. We'll also discuss the availability of Japanese pop music on records, tapes, cd's etc., away from Japan. Since many of our most active members are actually in Japan, our list is also a very good source of news concerning Japan's pop music scene (and more).

jewish

Contact: avi_feldblum@att.com (Avi Feldblum)

Purpose: The mailing list provides a non-abusive forum for discussion of Jewish topics with an emphasis on Jewish law.

Debates between Jews and non-Jews or between various factions of Judaism should be posted to talk.religion.misc or soc.culture.jewish.

jump-in-the-river

Contact: jump-in-the-river-request@presto.ig.com (Michael C. Berch)
-or- {apple,ames,rutgers}!bionet!ig!jump-in-the-river-request

Purpose: Jump-in-the-river is a mailing list for the discussion of the music and recordings of Sinead O'Connor, and related matters such as lyrics, tour information. Unmoderated.

khoros

Contact: khoros-request@chama.unm.edu

Purpose: to discuss the khoros software package, developed by Dr. Rasure, his staff, and his students at the University of New Mexico. Khoros is an integrated software development environment for information processing and visualization, based on X11R4.

killifish

Contact: killie-request@mejac.palo-alto.ca.us

Purpose: For people who keep and are interested in killifish, (family cyprinodontidae).

kites

Contact:

(USA/Canada/Europe):

kites-request@harvard.harvard.edu harvard!kites-request

(Japan):

koscvax.keio.junet!kites-request

Purpose: This mailing list is for people interested in making, flying, or just talking about all kinds of kites. Topics will (I hope) include kite plans and construction techniques, reviews of commercially available kites and plans, timely (or otherwise) human interest notes, and talk about flying.

lang-lucid

Contact: lang-lucid-request@csl.sri.com (R. Jagannathan)

Purpose: Discussions on all aspects related to the language Lucid, including (but not restricted to) language design issues, implementations for personal computers, implementations for parallel machines, language extensions, programming environments, products, bug reports, bug fixes/workarounds.

lasnet

Contact: lasnet-request@emx.utexas.edu (Langston James Goree VI)

Purpose: To facilitate the exchange of information among scholars doing research related to Latin America.

lds

Contact: lds-request@decwrl.dec.com -or- decwrl!lds-request

Purpose: a forum for members of the Church of Jesus Christ of Latter-Day Saints (mormons) to discuss church doctrine, mormon culture and life in general. Non-members are welcome to join, but we're not interested in flame wars.

LickVista

Contact: InfoVista-request@helios.ucsc.edu (Steve Allen)

Purpose: Discussion of the use and development of the Vista astronomical data reduction package which originated at Lick Observatory.

Linda

Contact: linda-users-request@cs.yale.edu
 linda-users-request@yalecs.bitnet
 {cmcl2,decvax,harvard}!yale!linda-users-request

Purpose: Discussion group for users and potential users of Linda based parallel programming systems. Linda is a set of operators that are added to various conventional programming languages to produce a parallel programming language.

lojban

Contact: lojban-list-request@snark.thyrsus.com (John Cowan)

Purpose: To use, discuss, and contribute to the development of the constructed human language called Lojban (known in earlier

versions as Loglan). Lojban has a grammar based on predicate logic, and vocabulary built from the six most widely spoken human languages. It is intended as a tool for experimental linguistics, as a medium for communication with computers, and as a possible international auxiliary language.

Lojban-list is an unmoderated mail reflector. New subscribers are asked to send their postal mailing addresses as well, so that they can be placed on the mailing list of The Logical Language Group, Inc., a non-profit organization. The postal mailing list provides materials that are useful in learning about the language. Lojban-list and LLG, Inc. are in no way affiliated with The Loglan Institute, Inc., or with James Cooke Brown, the founder of Loglan.

Logo

Contact: logo-friends-request@aiai.ed.ac.uk

Purpose: Discuss the Logo computer language.

mac-security

Contact: mac-security-request@eclectic.com (David C. Kovar)

Purpose: This mailing list is for people interested in Macintosh security. This can be used to:

- * Discuss existing security problems in various Macintosh applications.
- * Discuss security applications, hardware, and solutions.
- * Discuss potential problems and their solutions.
- * Just about anything else related to Macintosh security and access control.

With the arrival of System 7.0 and it's wealth of information sharing facilities, Macintosh security has entered a new era. Originally you only had to worry about someone getting into your Macintosh via the keyboard, or stealing it outright. Now it's much easier to browse through information on someone else's Macintosh over the network.

macgyver

Contact: shari@cc.gatech.edu (Shari Feldman)

Purpose: To discuss current and previous MacGyver episodes. We also discuss what is currently happening with the main and reoccuring actors on the show.

magic

Contact: magic-request@crdgw1.ge.com (Bruce Barnett)

Purpose: The MAGIC mailing list is for the discussion of sleight of hand and the art of magic. Membership to the list is restricted, as people who are merely curious are not encouraged to join. You must fill out a questionaire to qualify.

manchester

Contact: manchester-request@irss.njit.edu -or uunet!irss.njit.edu!manchester-request (Eric Ng)

Purpose: This list is primarily a forum where people interested in bands representative of the "Manchester" sound can get together for discussion. Examples of bands being discussed here include the Stone Roses, Happy Mondays, Inspiral Carpets, the Charlatans, 808 State, Northside, etc. The definition of the Manchester sound is vague at best: use your best judgement when trying to determine if a group falls under the aegis of Manchester.

Both list and weekly digest formats are available.

martial-arts

Contact: martial-arts-request@dragon.cso.uiuc.edu (Steven Miller)

Purpose: The martial arts mailing list is for discussion on various aspects of the martial arts. This includes teaching and training techniques, martial arts philosophy, self-defense, traditional and non-traditional styles, among others.

MasPar

Contact: mp-users@thunder.mcrcim.mcgill.edu (Lee Iverson)

Purpose: We have no restrictive charter, so are open to any and all discussions of hardware/software issues surrounding the use of the MasPar MP-1 class of parallel SIMD machines. These machines have a full-featured data-parallel instruction set and are programmable in Fortran90 and MPL, a K&R C with parallel data types.

Matlab

Contact: matlab-users-request@mcs.anl.gov (Chris Bischof)

Purpose: Discussion group for users and potential users of the MATLAB numeric computation software from The MathWorks. MATLAB is an interactive matrix-oriented product for linear algebra, digital signal processing, equation solving, control system design, and other engineering and scientific applications. This mailgroup is administered by the independent MATLAB User Group.

mazda-list

Contact: mazda-list-request@ms.uky.edu (Joel Abbott)

Purpose: Technical correspondance and discussion of Mazda-designed vehicles.

medphys

Contact: medphys-request@radonc.duke.edu

Purpose: An attempt to foster electronic communication between medical physicists, open to interested others. Medical physics is a somewhat opaque but widely used synonym for radiological physics -- the physics of the diagnostic and therapeutic use of radiation in medicine. At present most of the subscribers are involved in radiotherapy.

men

Contact: att!usl!mail-men-request
mail-men-request@usl.com (Marcel Franck Simon)

Purpose: This digested mailing list discusses "men's issues." Both women and men may join. Mail-men is a place where men and women can discuss men's issues in an atmosphere of openness and support. Men's issues are those problems and experiences that affect male humans.

military

Contact: military-request@att.att.com (Bill Thacker)

Purpose: Discussion of military technology, and related issues. This group is gatewayed to and from the Usenet newsgroup sci.military; all postings to the group are echoed to the list, and vice-versa. Both the group and list are moderated to prevent political flammage.

mr2-interest

Contact: mr2-interest-request@validgh.com (David Hough)

Purpose: Discussion of Toyota MR2's, old and new.

mtxinu-users

Contact: dunike!mtxinu-users-request mtxinu-users-request@nike.cair.du.edu

Purpose: Discussion and bug fixes for users of the 4.3+NFS release from the Mt. Xinu folks.

muscle-cars

Purpose: To offer a forum where other "muscle car" enthusiasts can offer advice, share their problems and solutions, discuss technical issues, racing, buying or selling parts, cars, or services, or just to discuss cars and swap stories with others. Flames and "car wars" ("my car is better/faster than yours") are discouraged.

This list is not moderated, so all submissions will be reflected to the others on the list without editing.

musicals

Contact: musicals-request@world.std.com (Elizabeth A. Lear)

Purpose: We discuss musicals, both movie and stage, (although about 90% of the articles concern stage productions and Broadway in particular). Discussion is meant to be more or less light-hearted and not bogged down with aesthetics. This is a place for circulating information and opinions, not a theater critics' forum. We discuss productions, ticket information, recordings, proper Sondheim-appreciation-and worship, upcoming shows and Broadway-related gossip.

mustangs

Contact mustangs-request@hpda.hp.com (Gary Gitzen)
 or {hplabs,sun,uunet}!hpda!mustangs-request

Purpose: To discuss/share technical issues, problems, solutions, and modifications relating to late model Ford Mustangs. Flames and "my car is faster than your car" mailings are discouraged.

mystery

Contact: mystery-request@csd4.csd.uwm.edu (Thomas Krueger)

Purpose: Mystery is a mailing list for mystery and detective fiction. Reviews of works and discussions of plot, characterization, and other aspects will be discussed. The medium, whether novel, movie, or television series, is unimportant.

NA-net

Contact: na.join@na-net.ornl.gov

Purpose: Numerical analysis discussions. To join the NA-NET send mail and in the message body specify the following three fields in any order:

Lastname: Firstname: E-mail:

NativeNet

Contact: gst@gnosys.svle.ma.us (Gary S. Trujillo)

Purpose: To provide information about and to discuss issues relating to indigenous people around the world, and current threats to their cultures and habitats (e.g. rainforests).

Ncube

Contact: ncube-users-request@cs.tufts.edu (David Krumme)

Purpose: Exchange of information among people using NCUBE parallel computers.

Network-Audio-Bits

Contact: Murph@Maine.BITNET (Michael A. Murphy)

Purpose: Network Audio Bits & Audio Software Review is a bi-monthly electronic magazine that features reviews of and information about current rock, pop, new age, jazz, funk, folk and other musical genres. A mixture of major label artists and independent recording artists can be found reviewed in these 'pages'.

neuron

Contact: neuron-request@hplpm.hpl.hp.com (Peter Marvit)

Purpose: Neuron-Digest is a moderated list (in digest form) dealing with all aspects of neural networks (and any type of network or neuromorphic system). Topics include both connectionist models (artificial neural networks) and biological systems ("wetware"). Back issues and limited software is available via FTP from hplpm.hpl.hp.com. The Digest is gatewayed to USENET's comp.ai.neural-nets.

newlists

Contact: info@vm1.nodak.edu (Marty Hoag)

Purpose: This is a mailing list "clearing house" for new mailing lists. Subscribers will get announcements of new lists that are mailed to this list.

NewsCom

Contact: starkid@ddsw1.mcs.com (Lance Sanders)

Purpose: To make available synergies discerned in, and created from, print news media (up to a 12-year time-span). Many "facts," particulary scientific ones, have a habit of changing with time. NewsCommando shows extreme prejudice toward those articles whose contents exhibit "legs." The depth of insight possible using the information mosaic method can be staggering. A form of electronic magazine, NewsCommando can serve as a reference tool, offer unique jump-off points for Medline, PaperChase, or other searches, and, in many ways, is the "poor-man's IdeaFisher/IdeaBank." Vol. 1 will contain the following articles:

ChemTao: Synergies In the Life Sciences

EarthWatch1: Defining the Scope of Environmental Destruction Why Euthanasia Must Never Be Legalized

Use "NewsCom request" in the "Subject:" field of message headers. Indicate article title(s) desired or "all" in body of message. Articles will be deposited in your mailbox with a "NewsCom/Vol.#" Subject header. Most will be in excess of 20K. Please group-save them to a file for later reading.

nucmed

Contact: nucmed-request@uwovax.uwo.ca -or-

trevorc@uwovax.uwo.ca (Trevor Cradduck)

Purpose: A discussion of Nuclear Medicine and related issues. Of

particular concern is the format of digital images.

numeric-interest

Contact: numeric-interest-request@validgh.com (David Hough)

Purpose: Discussion of issues of floating-point correctness and performance with respect to hardware, operating systems, languages, and standard libraries.

ntp

Contact: ntp-request@trantor.umd.edu

Purpose: Discussion of the Network Time Protocol.

objectivism

Contact: objectivism-request@vixie.sf.ca.us (Paul Vixie)

Purpose: A mailing list where students of Objectivism can discuss their ideas, concrete issues, exchange news, etc. Any issue that may have some relevance to Objectivists is appropriate here.

Objectivism-philosophy

Contact: objectivism-request@twwells.com (T. William Wells)

Purpose: A mailing list for discussion of the philosophy of Objectivism. This is not a general Objectivism mailing list; discussions are restricted to the philosophy itself.

objc

Contact: bunker!stpstn!objc-request (Anthony A. Datri)

Purpose: The Objective-C mailing list is for the discussion of Stepstone's Objective-C language, Objective-C compiler, Objective-C interpreter, and the ICPak-201 user interface library.

ocean.policy

Contact: {dual,vortex}!islenet!scott

Purpose: Discussions of the legal, economic, and military aspects of ocean use policies. Specific issues include the "law of the sea", pending treaties, economic implications of EEZs and the military use of the sea. Coordinated by Dr. Scott Allen, Associate Director, International Law of the Sea Institute, University of Hawaii.

oracle

Contact: oracle-people@iuvax.cs.indiana.edu (Steve Kinzler, Ray Moody)

Purpose: A cooperative effort for creative humor. The Usenet Oracle answers any questions posed to it. Send mail to oracle@iuvax.cs.indiana.edu (or {ames,rutgers}!iuvax!oracle) with the word "help" in the subject line for complete details on how to participate.

A distribution list is available for receiving compilations of the best Oracle answers (the Usenet Oracularities, also posted to rec.humor). Send mail to oracle-request@iuvax.cs.indiana.edu.

offroad

Contact: uunet!samsung!wizvax!offroad-request (Stephanie P. Gilgut)

Purpose: To discuss/share experiences about 4X4 offroad adventures, tips and anything else related to 4 wheel drive, off roading, etc. This list is reflector driven.

ODA Contact: utzoo!trigraph!oda-request (Les Gondor)

Purpose: ODA is a mailing list for topics related to the ISO 8613 standard for Office Document Architecture, and ODIF (Office Document Interchange Format).

oh-motss

Contact oh-motss-request@cps.udayton.edu

Purpose: The oh-motss (Ohio Members Of The Same Sex) mailing list is for open discussion of lesbian, gay, and bisexual issues in and affecting Ohio. The mailing list is not moderated, and is open to all, regardless of location or sexuality. Further, participation on the list does not necessarily indicate a person's sexual preference or orientation. The subscriber list is known only to the list owner.

orienteering

Purpose: Discuss all aspects of the sport of orienteering.

origami

Contact: origami-request@cs.utexas.edu (Brad Blumenthal)

Purpose: This unmoderated mailing list is for discussion of all facets of origami, the Japanese art of paper folding. Topics include bibliographies, folding techniques, display ideas,

descriptions of new folds, creativity, materials, organizations, computer representations of folds, etc.

Pagan

Contact: pagan-request@drycas.club.cc.cmu.edu (Stacey Greenstein)

Purpose: To discuss the religions, philosophy, etc. of paganism.

Papa

Contact: dgross@polyslo.calpoly.edu (Dave Gross)

Purpose: To discuss the life and works of Ernest Hemingway.

PC532

Contact: pc532-request@bungi.com (Dave Rand)

Purpose: a mailing list for people interested in the pc532 project. This is a National Semiconductor NS32532 based system, offered for a very low cost.

pdp8-lovers

Contact: pdp8-lovers-request@mc.lcs.mit.edu (Robert E. Seastrom)

Purpose: This mailing list exists in order to facilitate communication and cooperation between owners of vintage DEC computers, specifically, but not limited to, the PDP-8 series of minicomputers. Discussions of all manner of hardware, software, programming techniques are invited. Ownership of an 'antique' computer is not required for membership, but flames from people who feel that anything that is not cutting edge technology is worthless are discouraged.

Peru

Contact: owner-peru@athena.mit.edu (Ivan Cavero Belaunde)

Purpose: For discussion of Peruvian culture and other issues.

pharm

Contact: pharm-request@udel.edu

Purpose: a mailing list digest version of "alt.drugs" restricted to postings without repetitive political arguments or flames. Political articles of particularly novel value and reports of policy developments will be included.

Under no circumstances will any message be passed along that may be construed to be a solicitation to engage in any form of illegal behavior.

picasso-users

Contact: picasso-users@postgres.berkeley.edu

Purpose: For users of the Picasso graphical User Interface Development System.

pipes

Contact: pipes-request@paul.rutgers.edu (Steve Masticola)

Purpose: For all those who enjoy smoking, collecting, or sharing information on pipes, tobacco, and related topics. Flames aren't allowed (except for the purpose of lighting up :-)

porschephiles

Contact: porschephiles-request@bcm.tmc.edu (Stan Hanks)

Purpose: Discussion of Porsches.

posix-ada

Contact: umd5!grebyn!posix-ada-request -or posix-ada-request@grebyn.com (Karl Nyberg)

Purpose: to discuss the Ada binding of the Posix standard. This is the IEEE P1003.5 working group.

posix-testing

Contact: posix-testing-request@mindcraft.com (Chuck Karish)

Purpose: This list will provide a forum for discussion of issues related to testing operating systems for conformance to the various POSIX standards and proposed standards (IEEE 1003.x and whatever derivative standards may emerge from the NIST, ANSI, ISO, and so on).

These issues include problems related to test suites in general, testability of various features of the standards, and portability of the test suites to the many very different POSIX implementations we expect to see in the near future. We'll focus on the test suites themselves, rather than on the standards to which they test (notably POSIX p1003.3).

Prion

Contact: prion-request@stolaf.edu (Chris Swanson)

Purpose: While the main goal of the digest is to provide a resource for researchers working with prions and interested bystanders, all are welcome. All articles posted will be included in the next digest. If a poster feels that his posting is of an urgent nature, it may be distributed sooner than the regular digest.

PRL

Contact: brewer@ace.dec.com (John Brewer)

Purpose: The Pirate Radio SWL list is for the distribution of questions, answers, information and loggings of Pirate Radio Stations. This includes SW stations, MW (AM broadcast) and FM pirates.

progress

Contact: Progress@thinc.com (Ethan Lish)

Purpose: Discussion of the Progress RDBMS.

Quanta

Contact: da1n@andrew.cmu.edu

Purpose: Quanta is an electronically distributed magazine of science fiction. Published monthly, each issue contains short fiction, articles and editorials by authors around the world and across the net. Quanta publishes in two formats: straight ascii and PostScript* for PostScript compatible printers. To subscribe to Quanta, or just to get more info, send mail.

Queen

Contact: com@spacsun.rice.edu (Christopher Owen Miller) please include the word SUBSCRIBE as your subject

Purpose: Discussion about the rock group Queen.

qn

Contact: qn-request@athena.mit.edu (Drew Lewis)

Purpose: a mailing list for Queer Nation activists and for all interested in Queer Nation, an activist group devoted to furthering gay rights. The purpose of qn is to network among various Queer Nation chapters, discussion actions and tactics, and for general discussion of how to bring about Queer Liberation.

rc-flying

Contact : sun!suntri!black!rc-flying-request (Dwight Frye)

Purpose: Discussions about the sport of flying radio control models. This includes sailplanes, power planes, and helicopters.

recovery

Contact: recover@qiclab.scn.rain.com

Purpose: recovery is intended as a forum and support group for survivors of childhood sexual abuse/incest and/or their SO's. Postings are published in digest format and contributors may post anonymously. The emphasis is on healing and recovery through the use of the Twelve Steps of Alcoholics Anonymous as adapted for our purpose.

REM

Contact: valerie@athena.mit.edu (Valerie Ohm)

Purpose: Discussion of the music and lyrics by the music group

R.E.M.

rush

Contact: rush-request@syrinx.umd.edu

Purpose: fans of the Canadian rock group Rush discuss things

about the group and its music.

S-news

Contact: S-news-request@stat.wisc.edu (Douglas Bates)

Purpose: Information and discussion about the S language for data

analysis and graphics.

sappho

Contact: sappho-request@mc.lcs.mit.edu (regis m. donovan)

Purpose: A forum and support group for gay and bisexual women. The list is not moderated, but may become so if the volume and/or content begins to warrant it. A digest version is available; if you want it, be sure to mention it in your addition request. Men who want to "listen in," for whatever reason, are requested to use the feminist and alternates mailing lists instead; sappho membership is limited to women.

sca

Contact: sca-request@mc.lcs.mit.edu (Danulf Donaldson, MKA Dana Groff)

Purpose: This group discusses anything relating to the Society for Creative Anachronism, a world-wide medievallist organization.

Anyone in the Society (or interested in it) is welcome to join.

Those with basic questions about the Society should direct them to justin@inmet.com (Justin du Coeur, MKA Mark Waks), who will be happy to answer them. (Please note that the mailing list is not officially related to the SCA in any way; it is simply a group of talkative members).

The SCA mailing list is gatewayed into the rec.org.sca newsgroup.

SCO-list

Contact: sco-list-request@uunet.uu.net (Dave Armbrust)

Purpose: This group will be beneficial to any one interested or currently using Santa Cruz Operation products. This mailing list is a single area that discussions and information can be exchanged regarding ALL SCO products. This mailing is independent of any existing news groups.

scoodt

Contact: scoodt-request@xenitec.on.ca (Ed Hew)

Purpose: The SCO Open Desktop electronic mailing list is intended to provide a communications vehicle for interested parties to provide, request, submit, and exchange information regarding the configuration, implementation, and use of the SCO Open Desktop operating system as available from The Santa Cruz Operation.

All submissions will be posted as received with appropriate author attribution. Questions are welcome. Someone may even answer them.

The "scoodt" mlist is bi-directionally gatewayed to sco.opendesktop which is also available as a limited distribution newsgroup.

scribe

Contact: scribe-hacks-request@decwrl.dec.com

Purpose: This list is designed for persons who perform the role of Scribe Database Administrator at their installation. Discussion will be about Scribe features, bugs, enhancements, performance, support, and other topics of interest to Scribe DBAs. The list will NOT be moderated, but will simply consist of a mail "reflector" - ie. if you send a message to the list, it will be rebroadcast to everyone on the list. Discussion at the level of "How do I get a paragraph to indent 5 spaces instead of 3?" is specifically discouraged.

security

Purpose: to notify of unix security flaws BEFORE they become public knowledge, and to provide unix security enhancement programs and information. Most postings are explanations of specific unix security "holes", including fixes or work-arounds to prevent their usage. This list is not intended for discussions of general and/or theoretical security issues. It is joined at the pleasure of the applicant's system administrator and the list administrator.

Requests to join must be mailed from a system administration account and must specify (1) the full name of the recipient; (2) the address to send the list to; (3) the address of the contact person for that site (if different from (2)); (4) whether you want moderated digests or "reflected" postings.

SFER-l (South Florida Environmental Reader)
Contact: sfer-request@mthvax.cs.miami.edu (a.e. mossberg)

Purpose: A monthly digest of environmental articles of interest to South Florida residents. The newsletter is available in both paper and electronic formats.

sil-info

Contact: sil-info-request@isf.unisys.com (Tom Jewell)

Purpose: Discussion of Interactive Literature and the activities of the Society for Interactive Literature (SIL). The purpose of the Society for Interactive Literature is to study and promote all forms of Interactive Literature, defined as any kind of narrative in which a participatory process between the author or performer and the reading, viewing, or attending audience determines or influences the plot of the story.

Much of the current discussion on the list concerns Live-Action Role Playing Games, which evolved out of improvisational theatre, conventional role-playing games, and complex "assassin"-type games. A typical game might involve thirty to eighty players taking the part of characters in a situation, with network of interconnecting motivations that provide the driving force for the action in the game. Live games have a small set of rules that simulate activities that would be impractical or unsafe to play out, and to simulate abilities of the character that the player may not possess. The majority of play consists of interacting with the other players "in character" to accomplish your character's goals and discover new ones. Games have been run with science fiction, fantasy, historical, and literary themes, as well as others that are difficult to classify.

The mailing list is not limited to discussion of live games, and is open to discussion of anything that might be considered Interactive Literature.

silva

Contact: silva-request@guild.org (Scott Logan)

Purpose: To discuss and share information related to the Silva Method personal development course. Topics can include, but are not limited to, discussion of the techniques, sharing of success stories, lecturer schedules, and workshop reviews. The list is open to both graduates of the course and to those who are interested in it.

The Silva Method (a.k.a. The Silva "Mind Control" Method) is a personal development course which teaches mental skills. It is taught in over 63 countries in 18 languages, and is the world's most famous and popular mind development system.

SkillsBank

Contact: sun!kass!richard (Richard Karasik)

Purpose:I'd like to get people together on a mailing list who are willing to share there skills with others -not just the computist ones, altho that's handy to know, but some of the oddball ones that we all seem to have aquired.

Ground rules: the list is not going to be publicly available but requests to the list for specific skills will be passed on to the people that have them, and they can decide about the level of participation they want to have. The only public piece that will be mailed around is the new skills that have been added, and the new requests for assistance.

I am open to any other suggestions for how to make this work.

smail3-users

Contact: smail3-users-request@cs.athabascau.ca (Lyndon Nerenberg)

Purpose: The smail3-users mailing list is targeted towards those who administer smail3.X based mailers. Discussion of operational problems and fixes, specialized configurations, and other topics related to the day-to-day operation of smail3.X are found here. The list does not discuss smail 2.5 issues. (Smail 2.5 is an unrelated piece of software that appeared in the comp.sources.unix archives under the archive name "smail3.") Questions about smail 2.5 should be directed to the newsgroup comp.mail.misc. Smail3-users deals primarily with operational issues. If you're interested in technical discussions on smail3 internals, consider joining smail3-wizards.

smail3-wizards

Contact: smail3-wizards-request@cs.athabascau.ca (Lyndon Nerenberg)

Purpose: Smail3-wizards is a discussion forum for people who are actively porting, debugging, and extending smail3.X. Discussion should be limited to topics concerning smail3 internals. Questions about smail3 installation and operation should be directed to the smail3-users list.

smiths-fans

Contact: larryn@csufres.csufresno.edu

Purpose: We are a mailing list dedicated to the music of the rock group, The Smiths. Though the group is no longer together, we feel there is a substantial enough body of work to keep a list such as this going. Topics include discussion/interpretation of lyrics, work being done currently by members, and other intellectual concerns.

sports-cards

Contact: cards-request@tanstaafl.uchicago.edu (Keane Arase)

Purpose: For people interested in collection, speculation and investing in baseball, football, basketball, hockey and other trading cards and/or memoribilia. Discussion and want/sell lists are welcome. Open to anyone.

SQL-sybase

Contact: sybase-request@apple.com

Purpose: This is an semi-unmoderated mailing list for sharing information about the Sybase SQL server and related products.

stagecraft

Contact: stagecraft-request@jaguar.utah.edu (Brad Davis)

Purpose: This list is for the discussion of all aspects of stage work, including (but not limited to) special effects, sound effects, sound reinforcement, stage management, set design and building, lighting design, company management, hall management, hall design, and show production. This is not a forum for the discussion of various stage productions (unless the discussion pertains to the stagecraft of a production), acting or directing methods (unless you know of ways to get actors to stand in the right spots), film or video production (unless the techniques can be used on the stage). The list will not be moderated unless problems crop up. Archives will be kept of the discussion (send mail to stagecraft-request for copies).

stardent-users

Purpose: The stardent-users mailing list provides a forum for discussion of using/programming computers manufactured by Stardent Computer. The discussion is intended to cover programming topics (e.g. XFDI, phigs+, Dore, parallel and/or vectorizaton techniques, etc.), using one of their computers as an application engine for a Stardent software package or a third party package (e.g. AVS, Quanta, NMR1/2, etc.), or any other threads deamed applicable (e.g. customer service, fallout of merger, etc). The list will not be moderated, and it is hoped that it will generate enough interest to justify a news group.

stormcock

Contact: stormcock-request@dcs.qmw.ac.uk (Paul Davison)

Purpose: For general discussion and news concerning the music of Roy Harper, a folk-rock musician with a conscience. Recommendations and news concerning similar artists are encouraged. The list is set up as a mail reflector.

NB: Some internet sites may have to route mail through the UK internet gateway, "nsfnet-relay.ac.uk". Also, in some exceptional circumstances we may have to refuse membership because we get charged for mail to certain addresses in the uucp domain.

sun-386i

Contact: sun-386i-request@rice.edu

Purpose: Discussion and information about the 386i-based Sun

machines.

sun-managers

Contact: sun-managers-request@eecs.nwu.edu

Purpose: Information of special interest to managers of sites

with Sun workstations or servers.

sun-nets

Contact: sun-nets-request@umiacs.umd.edu

Purpose: Discussion and information on networks using Sun

hardware and/or software.

supercomputers

Contact: supercomputer-request@nyu.edu -or- cmcl2!supercomputer-request Submissions: supercomputer@nyu.edu, cmcl2!supercomputer

Purpose: To discuss "supercomputers" and related technology. Contact the list administrators for more information.

svr4-admin

Contact: dynasys!svr4-admin (Jesse W. Asher)

Purpose: This is for discussion of topics related to Unix System V Release 4.

sysops

Purpose: The purpose of this list is to facilitate communication among operators of computerized bulletin-board systems. Topics will include, but are certainly not limited to: applications, security, legal issues, and software.

†3

Contact: t3-request@ncsugn.ncsu.edu (Ted H. Emigh)

Purpose: Discussion of T3, a WYSIWYG (almost) scientific word processing system for MS-DOS computers.

tadream

Contact: tadream-request@vacs.uwp.edu (Dave Datta)

Purpose: Tadream is a forum for discussions about Tangerine Dream and related artists. The discussions are not moderated, but discussions should have some small relation to Tangerine Dream (solo works and instrumentation discussions are welcome). The list is set up both as a mail relay and a daily digest. (alternate mail-paths:uwm!uwpvacs!tadream-request, uwpvacs!tadream-request@uwm.edu)

Talon-Eclipse-Laser

Contact: talon@appmag.com (Todd Day)

Purpose: For owners and admirers of Talon, Eclipse or Laser automobiles.

tandy4k

Contact: ...!{psu-cs,reed,ogcvax}!qiclab!tandy4k-users (Steven Neighorn)

Purpose: A mailing list for owners, users, and other interested parties of the Intel 80386-based Tandy 4000 Microcomputer. The list will contain problems encountered, hints, program source code, and anything else related to the operation of Tandy's newest entry into the world of microcomputers.

tartan-c

Contact: astrovax!tartan-c-requests

Purpose: Discussion related to the Tartan C compiler for the vax. This can include bug reports, benchmarks, C quirks handled differently by tcc, experiences compiling system source with tcc, etc.

tcad

Contact: tcad-request@iec.ufl.edu (Mark Law)

Purpose: This mailing list ihas been set up to serve the needs of users and software developers of TCAD (technology computer aided design) codes. These codes typicaaly aid the the IC process designer in developing, debugging, and optimizing new and old processes. The group discusses software such as PISCES, SUPREM, FABRICS, SAMPLE, SIMPL, and MINIMOS.

tcp-group

Contact: tcp-group-request@ucsd.edu

Purpose: Discussion about promoting TCP/IP use on Ham packet

radio.

tekumel

Contact: tekumel-request@ssdc.honeywell.com (Brett Slocum)

Purpose: This mailing list exists to discuss the world of Tekumel, the fantasy world invented by M.A.R. Barker in the roleplaying games "Empire of the Petal Throne" and "Swords and Glory", and the DAW novels "Man of Gold" and "Flamesong".

Anything related to Tekumel is welcome: game modifications, accounts of campaigns, questions, fiction, tables, NPCs, tips for converting to new game systems, etc. Listeners as well as contributors are welcome. This list is in digest format and is mailed when submissions warrant it (weekly if possible).

Testing-Archive

Contact: testing-archive-request@ernie.cs.uiuc.edu (Brian Marick)

Purpose: The purpose of Testing-Archive is to collect and archive material for software testing practitioners and researchers who are too busy to read ongoing discussions. Therefore, typical messages will be abstracts of technical reports, announcements of testing tools (both commercial and noncommercial), reviews of testing tools, and summaries of discussions from other mailing lists or newsgroups. The mailing list will be archived and made available for anonymous FTP via cs.uiuc.edu:/pub/testing/archiveXX. The list is unmoderated.

Testing-Research

Contact: testing-research-request@ernie.cs.uiuc.edu (Brian Marick)

Purpose: Testing-Research is a forum for testing researchers to discuss current and future research at greater length (and with perhaps lower "density") than in Testing-Archive. The goal of Testing-Archive is to create a historical record; the goal of Testing-Research is to create a community. Since testing is one of the most down-to-earth kinds of software engineering research, testing practitioners are welcomed. Messages about practice should be the kind that can guide or improve research; messages that can improve practice should go in comp.software-eng. This list is unmoderated.

thicva

Contact: thicva-request@stjhmc.fidonet.org -or{gatech,ames,rutgers}!ncar!noao!asuvax!stjhmc!thicva-request

Purpose: The purpose of this list is to provide for the discussion of Traumatic Head Injuries, Cerebrovascular Accidents, and other related Intracranial Malformations. It is hoped that this conference will provide a clearing house for information on the above topics, on facilities that specialize in the treatment of Intracranial problems, and most importantly a conference where

victims and their families can meet to discuss problems, concerns, and successes. An electronic international support group.

think-c

Contact: think-c-request@ics.uci.edu (Mark Nagel)

Purpose: This list exists to discuss the Think C compiler for the Macintosh. Acceptable topics include discussion of compiler problems and solutions/workarounds, discussion of object-oriented programming and Macintosh programming, and the sharing of source code. Associated with this list is an archive stored on ics.uci.edu accessible via ftp and a mail archive server (archive-server@ics.uci.edu). Submissions to the archive should go to think-c-request.

TolkLang

Contact: tolklang-request@lfcs.ed.ac.uk (Julian Bradfield)

Purpose: Discussions of the linguistic aspects of J.R.R. Tolkien's works. This covers everything from Elvish vocabulary and grammar to his use of Old English. The list is (lightly) moderated.

torg

Contact: torg-owner@supernet.haus.com (Clay Luther)

Purpose: Torg is the mailing list dedicated to the infiniverse of West End Game's "Torg, the Possibility Wars" Roleplaying Game.

towers

Contact: bill@wrangler.wlk.com (Bill Kennedy)

Purpose: General discussion on the subject of NCR Tower computers. Gatewayed with comp.sys.ncr

transputer

Submissions: transputer@tcgould.tn.cornell.edu -or-

...{cmcl2,decvax,uw-beaver}!cornell!batcomputer!transputer

Contact: transputer-request (at the above address)

Purpose: The Transputer mailing list was created to enhance the communication among those who are interested in the Transputer and Transputer based systems.

Submissions should be of non-proprietary nature and be concerned with, but not limited to:

- o Algorithms
- o Current development efforts (hardware and software)
- o INMOS and third party systems (Meiko, FPS, etc.)
- o Interfaces
- o Dedicated computational resources

o Occam and Non-Occam language development

Archives of submissions are available by anonymous ftp from the host tcgould.tn.cornell.edu (userid "anonymous", password is of the form "user@host") and through uucp on a per-request basis.

The list is maintained as a mail reflector. Submissions are therefore sent out as they are received.

traveller

Contact: traveller-request@metolius.wr.tek.com (James T. Perkins)

Purpose: This mailing list exists to discuss the TRAVELLER Science Fiction Role Playing Game, published by Game Designers' Workshop. All variants of Traveller (Traveller 2300, MegaTraveller), and Traveller games (Snapshot, Trillion Credit Squadron, etc.) are included, too. Discussion is unmoderated and open to all facets and levels of Traveller discussion. Listeners as well as contributors are welcome.

turnabout

Contact: turnabout-request@ads.com (Charleen Bunjiovianna)

Purpose: Discussion of gender issues in an attempt to understand male/female socialization and how it affects our adult lives.

tx-firearms

Contact: tx-firearms-request@frontier.lonestar.org

Purpose: The tx-firearms mailing list has been created to keep interested parties aware of Texas firearms laws, hunting seasons and regulations, pending legislation, group meetings, competition schedules, basically anything related to firearms in the State of Texas. The list is not moderated and is available to anyone.

uk-motss

Contact: uk-motss-request@cc.ic.ac.uk (Nigel Whitfield)

Purpose: The uk-motss mailing list is for gay people in the UK, or those who are interested in the UK gay scene / politics. It is a supportive environment for those unwilling or unable to read the soc.motss newsgroup, and confidentiality is assured. Anonymous posting is available.

ultralite-list

Contact: ultralite-list-request@csd.mot.com (Brian Smithson)

Purpose: Discussion forum for users or potential users of the original NEC UltraLite PC1701 and PC1702 computers (the V30-based notebook computer with a 1MB or 2MB silicon hard disk, not the newer 286- and 386-based models). Topics include general

information, tips, techniques, applications, experiences, and sources for hardware, software, accessories, and information.

Unisys

Contact: unisys-request@bcm.tmc.edu (Richard H. Miller)

Purpose: Discussion of all Unisys products and equipment.

UPS-alumni

Contact: ups_alumni-request@stephsf.com (Bill England)

Purpose: The mailing list has been put together ostensibly for the purpose of linking graduates of The University of Puget Sound. This list will also help those interested keep abreast of current events and changes at the University. Commercial postings are prohibited.

uruguay

Contact: uruguay-request@eniac.seas.upenn.edu (Raul Polakof)

Purpose: A mailing list for general discussions and information. To subscribe, please send name, e-mail, topics of interest, and (optionally), address and phone number. Spanish is the dominent language in this group.

usenet.hist

Contact: bjones@ucsd.edu (Bruce Jones)

Purpose: This list is for the discussion of the socio-cultural, technical and political history of usenet. The list is not moderated and is open to anyone interested in the history of the net.

usml

Contact: usml-request@hc.dspo.gov (Josh Siegel)

Purpose: This mailing list is for discussions on various techniques for simulations of the universe as related to games and reality.

venezuela

Contact: venezuela-request@arisia.xerox.com (Eduardo Pelegri-Llopart)

Purpose: Discussion of anything related to Venezuela.

VMEbus

Contact: att!houxl!mlh (Marc Harrison)

Purpose: A user's group for the AT&T VMEbus products to provide a two-way USENET conduit for the open exchange of information, both within and outside of AT&T. There's very little data that's proprietary about the products (other than the source code for UNIX

System V/VME), so the list is open to suggestions as to items of interest.

If you're interested, please send your name, e-mail path (via att preferred), affiliation, and use of WE 321SB (if you have one). Suggestions for items of interest are also encouraged.

weights

Contact: weights-request@mickey.disney.com (Michael Sullivan)

Purpose: The discussion of all aspects of using weights in exercise. Includes bodybuilding (competetive and non-competetive), sport-related weight training, "stay in shape" weight training; basically anything to do with lifting weights.

whitewater

Contact: rsk@gynko.circ.upenn.edu (Rich Kulawiec)

Purpose: To discuss WhiteWater sports, experiences, and information. Includes kayak and canoeing enthusiasts. Please note that this mailing list is partially bidirectionally gatewayed to the USENET group rec.boats.paddle. Whitewater specific postings are culled and sent to the mailing list, and mailing list traffic is sent to the newsgroup. This mailing list is moderated and is probably only useful to those who do not receive rec.boats.paddle, or are only interested in the whitewater traffic in that group.

wildnet

Contact: wildnet-request@herald.usask.ca --or-herald!wildnet-request (Eric Woodsworth)

Purpose: This list is concerned with computing and statistics in fisheries and wildlife biology. Relevant topics include G.I.S., ecological modelling, software, etc.

windsurfing

Contact: windsurfing-request@gallium.uucp

...uunet!philabs!crpmks!gallium!windsurfing-request

...uunet!hsi!stpstn!gaboon!crpmks!gallium!windsurfing-request

Purpose: The windsurfing mailing list serves as a discussion forum for boardsailing enthusiasts all over the world. While non-windsurfers are welcome to join, the primary purpose is to promote the sport of windsurfing by specializing in windsurfing related topics such as equipment, technique, sailing sites, weather, the windsurf industry, etc. We welcome you to join and share your windsurfing experiences and thoughts. The list is non-moderated and your articles will circulate to everyone who joins.

x-ada

Contact: x-ada-request@expo.lcs.mit.edu

Purpose: to discuss the interfaces and bindings for an

Ada interface to the X window system.

XGKS

Contact: xgks-request@unidata.ucar.edu (Steve Emmerson)

Purpose: A mailing-list for the maintenance, enhancement, and evolution of the XGKS package, created by the University of Illinois under contract with IBM and distributed as part of X11R4. The XGKS package is a full 2C GKS implementation and allows GKS applications to operate in an X Window System environment.

yello

Contact: yello-request@polyslo.calpoly.edu (Cliff Tuel)

Purpose: The Yello Mailing List is a forum for discussing anything about the group Yello, or any solo works by the band's members. An extensive discography is available, as are several other files of interest.

Yes/ABWH

Contact: v111pbxx@ubvms.cc.buffalo.edu (Cathy Leak)

Purpose: The progressive rock group Yes and its many offspring (especially the current branch of Anderson, Bruford, Wakeman and Howe). We do a little of everything: news, reviews, trivia, etc.

Yiddish

Contact: dave@lsuc.on.ca -or- lsuc!dave (Dave Sherman)

Purpose: articles, jokes, etc. in transliterated Yiddish, and discussion of Yiddish language and culture (in English). Some familiarity with the language is required to understand most of the messages.

7-cars

Contact: rsiatl!z-car-request (John De Armond)

Purpose: The Z-car mailing list operates for the benefit of those interested in Datsun/Nissan Z cars. The interest base is primarily for the original Z, though all discussion regarding the Z line of cars is welcome.

zeppelin

Contact: zeppelin-request@ux.acs.umn.edu (Eric David Hendrickson)

Purpose: For fans of the rock group Led Zeppelin.

ZForum

Contact: zforum-request@prg.oxford.ac.uk (Jonathan Bowen)

Purpose: ZForum is intended to handle messages concerned with the formal specification notation Z. Z, based on set theory and first order predicate logic, has been developed at the Programming Research Group (PRG) at Oxford University for well over a decade. It is now used by industry as part of the software (and hardware) development process in both the UK and the US. It is currently undergoing standardization. ZForum provides a convenient forum for messages and queries concerned with recent developments and the use of Z.

- -

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center, Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398 Internet: spaf@cs.purdue.edu phone: (317) 494-7825

How to Get Information about Networks

Xref: blister news.admin:4316 news.announce.newusers:70

Path: blister!jtsv16!torsqnt!news-server.csri.toronto.edu!rpi!zaphod.mps.ohio-

state.edu!samsung!news.cs.indiana.edu!purdue!spaf

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.admin,news.announce.newusers Subject: How to Get Information about Networks

Message-ID: <15411@ector.cs.purdue.edu>

Date: 25 Jul 91 23:16:17 GMT Expires: 23 Oct 91 23:16:16 GMT

Followup-To: news.admin

Organization: Dept. of Computer Sciences, Purdue Univ.

Lines: 62

Approved: spaf@cs.purdue.EDU

Supersedes: <14707@ector.cs.purdue.edu>

Original-from: Randall Atkinson <randall@uvaarpa.virginia.edu>

[Most recent change: 16 Oct 1989 by spaf@cs.purdue.edu (Gene Spafford)]

This is a periodic posting on how to get information about the National Science Foundation (NSF) Internet.

The NSFNET Network Service Center (NNSC) makes current documentation on the NSFNET available via a mail server and by anonymous ftp.

Because the contents of the documents are constantly being updated, this posting only describes how to obtain a current copy rather than providing the data directly.

1) Using anonymous FTP:

host: SH.CS.NET username: anonymous password: quest

directory: nsfnet (i.e. type: cd nsfnet)

The files "help-ftp", "help.1" and "nsfnet-help" will provide you with information to get started.

2) Using the mail server: Send mail to the address shown below (either nnsc.nsf.net or sh.cs.net) and leave the "Subject;" line blank. The first line of the message body should contain a "Request:" line, followed by a "Topic:" line, as described below. You do not need a "Subject:" line, but be sure your mailer puts out a valid "From:" line that the server can respond to!

To obtain current contact information on the NSFNET and its affiliated regional networks, send the following mail message to the mail-server: "info-server@nnsc.nsf.net":

Request: NSFNET Topic: NNSC

To obtain information on how to connect to the Internet through the NSFNET or an NSF-affiliated network, send the following mail message to the mail-server "info-server@nnsc.nsf.net":

Request: NSFNET
Topic: CONNECTING

To obtain information on the documents currently available on the NSFNET from the info-server, send the following mail message to the mail server "info-server@nnsc.nsf.net":

Request: NSFNET Topic: NSFNET-HELP

If you need to contact the people at the NNSC directly, you can either send mail or call them. It would be a good idea to read the NSFNET documents first though.

Electronic Mail: <nnsc@nnsc.nsf.net> Telephone: +1 (617) 873-3400.

--

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center, Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398

Internet: spaf@cs.purdue.edu phone: (317) 494-7825

List of Periodic Informational Postings

Xref: blister news.lists:188 news.announce.newusers:74

Path: blister!jtsv16!torsqnt!news-

server.csri.toronto.edu!rpi!think.com!samsung!news.cs.indiana.edu!purdue!gynko.circ.up

enn.edu!rsk

From: rsk@gynko.circ.upenn.edu

Newsgroups: news.lists,news.announce.newusers
Subject: List of Periodic Informational Postings

Message-ID: <15410@ector.cs.purdue.edu>

Date: 25 Jul 91 23:16:15 GMT Expires: 23 Oct 91 23:16:15 GMT Sender: spaf@cs.purdue.EDU

Reply-To: rsk@gynko.circ.upenn.edu

Followup-To: news.lists

Lines: 1153

Approved: spaf@cs.purdue.EDU

Supersedes: <14706@ector.cs.purdue.edu>

Original-from: rsk@gynko.circ.upenn.edu (Rich Kulawiec)

[Most recent change: 22 Jul 91 by rsk@gynko.circ.upenn.edu (Rich Kulawiec)]

Many newsgroups contain articles which are posted on a periodic basis. These articles tend to be useful for both novice and experienced users, as they usually fall into one of these categories:

- 1. How-to articles explaining some of the basics and fine points of network usage, etiquette, standards, etc.
- 2. Introductory notes about one or more newsgroups, covering policies (if any) for submissions to that group, usage, etc. Common questions and answers pertinent to a newsgroup(s).
- 3. Indexes of archives, or pointers to archives for various groups. Periodic newsletters, calendars, pointers to publications.
- 4. Statistical information and reports about Usenet; tables of Usenet hosts, links, etc.
- 5. Miscellany, including small useful sources, "fun" lists, and so on.

This is a list of the periodic postings known at this time; each posting is listed in an entry that includes who posts the article, which newsgroup(s) it appears in, what "Subject" line is used, and how often the article is posted. The list is sorted by the "Newsgroups" line. The character '*' is used as a wildcard, e.g. "v**INF1" matches

"v01INF1", "v02INF1", etc.

Corrections and additions (via MAIL) are most welcome.

3/21/90

Jonathan Kamens of MIT's Project Athena has kindly set up an archive of periodic postings; the archive is constructed by a shell script which reads this article, using it as a guide as to which postings should be archived. What follows is a condensed excerpt of his article announcing this archive...

This archive is on "pit-manager.mit.edu" (18.72.1.58), and is accessible via anonymous ftp in the directory "/pub/usenet". The structure of this directory is such that each subdirectory is a newsgroup name, and the files in the subdirectories are the periodic postings. The filenames are constructed by mapping the titles to filenames in a pretty simple way, e.g.

/pub/usenet/news.announce.newusers/Answers to Frequently Asked Questions

The archive is also accessible via mail archive server. 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 a subject or body of

send usenet/news.announce.newusers/Answers_to_Frequently_Asked_Questions

You can also do "send help", "send index", "send usenet/index", "send usenet/news.announce.newusers/index", etc.

Comments, questions, suggestions, etc. can be sent to me at the address below, or at {root,jik,postmaster,daemon}@pit-manager.mit.edu. Feel free to mention this service in any informational postings you may maintain; I hope to keep it up and running for a while.

Jonathan Kamens MIT Project Athena jik@Athena.MIT.EDU

Office: 617-253-8085

USnail: 11 Ashford Terrace Allston, MA 02134

Home: 617-782-0710

From: mdchaney@bronze.ucs.indiana.edu (M Darrin Chaney)

Newsgroups: alt.folklore.urban

Subject: Monthly Posting

Frequency: monthly

From: jef@well.sf.ca.us

Newsgroups: alt.hackers Subject: (*) Welcome to alt.hackers -- automated posting. Frequency: weekly From: brendan@cs.widener.edu (Brendan Kehoe) Newsgroups: alt.tv.simpsons Subject: Monthly Posting: Frequently Asked Questions Frequency: monthly From: eugene@amelia.nas.nasa.gov (Eugene N. Miya) Newsgroups: ca.earthquakes, misc.emerg-services Subject: [lm **/**] Frequently asked earthquake references (where to find) Frequency: biweekly From: eugene@amelia.nas.nasa.gov (Eugene N. Miya) Newsgroups: ca.general,ba.general Subject: [1/m **/**] How to cancel news articles Frequency: biweekly From: eugene@amelia.nas.nasa.gov (Eugene N. Miya) Newsgroups: ca.general,ba.general Subject: [1/m **/**] Reminders for old hands and new readers ([b|c]a.general) Frequency: biweekly From: eugene@amelia.nas.nasa.gov (Eugene N. Miya) Newsgroups: ca.general,ba.general Subject: [l/m **/**] A short note on Distribution: Frequency: biweekly From: eugene@amelia.nas.nasa.gov (Eugene N. Miya) Newsgroups: ca.general,ba.general Subject: [1/m **/**] Kill files . . . with extreme prejudice Frequency: biweekly From: eugene@amelia.nas.nasa.gov (Eugene N. Miya) Newsgroups: ca.general,ba.general Subject: [1/m **/**] A short note on posting, cross-posting Frequency: biweekly From: odin@ucscb.UCSC.EDU (Jon Granrose) Newsgroups: comp.archives,comp.misc Subject: Anonymous FTP list Frequency: monthly From: eugene@amelia.nas.nasa.gov (Eugene N. Miya) Newsgroups: comp.benchmarks Subject: [1/m */*/**] benchmark info sources [under construction] Frequency: monthly From: koreth@panarthea.EBay.Sun.COM (Steven Grimm) Newsgroups: comp.binaries.atari.st

Subject: v**INF3: How to use comp.binaries.atari.st Frequency: every few months From: boneill@hawk.ulowell.edu (Brian O'Neill) Newsgroups: comp.binaries.ibm.pc Subject: v**INF1: bin.man, Beginner's Guide to Binaries Frequency: monthly From: boneill@hawk.ulowell.edu (Brian O'Neill) Newsgroups: comp.binaries.ibm.pc Subject: v**INF2: ftp.man, Beginner's Guide to FTP Frequency: monthly From: boneill@hawk.ulowell.edu (Brian O'Neill) Newsgroups: comp.binaries.ibm.pc Subject: v**INF3: starter.kit, CBIP Starter's Kit Frequency: monthly From: dhesi@bsu-cs.bsu.edu (Rahul Dhesi) Newsgroups: comp.binaries.ibm.pc Subject: v**INF4: format.inf, description of format of postings Frequency: monthly From: dhesi@bsu-cs.bsu.edu (Rahul Dhesi) Newsgroups: comp.binaries.ibm.pc Subject: v**iINF5: clarkson.inf, Clarkson comp.binaries.ibm.pc archives Frequency: monthly From: chip@vector.dallas.tx.us (Chip Rosenthal) Newsgroups: comp.dcom.telecom Subject: "Welcome to comp.dcom.telecom!" Frequency: monthly From: lee@sq.com (Liam R. E. Quin) Newsgroups: comp.fonts,comp.text.tex Subject: Definitive list of all fonts available for Metafont Frequency: every six weeks or so From: jef@well.sf.ca.us (Jef Poskanzer) Subject: (04feb91) Frequently asked questions - READ THIS BEFORE YOU POST. Newsgroups: comp.graphics Frequency: weekly From: scs@adam.mit.edu (Steve Summit) Newsgroups: comp.lang.c Subject: Answers to Frequently Asked Questions (FAQ) on comp.lang.c Frequency: monthly From: scs@adam.mit.edu (Steve Summit) Newsgroups: comp.lang.c Subject: Answers to Frequently Asked Questions (FAQ) on comp.lang.c (Abridged)

Frequency: semimonthly From: scs@adam.mit.edu (Steve Summit) Newsgroups: comp.lang.c Subject: Changes to Answers to Frequently Asked Questions (FAQ) on comp.lang.c Frequency: monthly From: jcc@adesign.uucp (Collet Jean-Christophe) Newsgroups: comp.lang.c++ Subject: C++ products & books list Frequency: monthly From: syd@DSI.COM (Syd Weinstein) Newsgroups: comp.mail.elm Subject: Elm Group monthly posting - * * Frequency: monthly From: uucpmap@rutgers.rutgers.edu (UUCP Mapping Project) Newsgroups: comp.mail.maps Subject: UUCP map for ***** Frequency: monthly From: Bill Wohler <wohler@sap-ag.de> Newsgroups: comp.mail.mh Subject: MH Frequently Asked Questions (FAQ) with Answers Frequency: monthly From: john@utcs.utoronto.ca (John Chew) Newsgroups: comp.mail.misc,news.newusers.guestions Subject: Inter-Network Mail Guide Frequency: monthly From: cpcahil@virtech.uucp (Conor P. Cahill) Newsgroups: comp.misc,comp.sources.wanted,comp.unix.questions,news.newusers.questions,news.softwar Subject: Monthly posting on USENET manual set Frequency: monthly From: usenet@chg.mcd.mot.com (Newprod Moderator) Newsgroups: comp.newprod Subject: comp.newprod Guidelines Frequency: four times a year From: ctp@cs.utexas.edu (Clyde T. Poole) Newsgroups: comp.org.decus,comp.os.vms,comp.sys.dec Subject: DECUS Questions Answered Frequency: monthly From: pozar@toad.com (Tim Pozar) Newsgroup: comp.org.fidonet

Subject: FidoNews Frequency: weekly From: Glen Overby <overby@plains.nodak.edu> Newsgroups: comp.os.minix Subject: the Minix Information Sheet Frequency: monthly From: tp@mccall.com Newsgroups: comp.os.vms,vmsnet.misc Subject: Info-VAX Monthly Posting, Part 1 of 3 Frequency: monthly From: tp@mccall.com Newsgroups: comp.os.vms,vmsnet.misc Subject: Info-VAX Monthly Posting, Part 2 of 3 Frequency: monthly From: tp@mccall.com Newsgroups: comp.os.vms,vmsnet.misc Subject: Info-VAX Monthly Posting, Part 3 of 3 Frequency: monthly From: koreth@panarthea.EBay.Sun.COM (Steven Grimm) Newsgroups: comp.sources.atari.st Subject: ???? Frequency: every few months From: reid@decwrl.DEC.COM (Brian Reid) Newsgroups: comp.sources.d,news.admin Subject: arbitron program (v*.*.*--last updated * *** ****) Frequency: monthly From: reid@decwrl.DEC.COM (Brian Reid) Newsgroups: comp.sources.d,news.admin Subject: notesfile arbitron (v*--last updated * *** ****) Frequency: monthly From: billr@saab.cna.tek.com (Bill Randle) Newsgroups: comp.sources.games Subject: v**INF1 Frequency: start of every volume, which is 3-6 months... From: kent@sparky.imd.sterling.com (Kent Landfield) Newsgroups: comp.sources.misc Subject: v**INF1: Introduction to comp.sources.misc Frequency: start of every volume, which is 1-3 months... From: kent@sparky.imd.sterling.com (Kent Landfield) Newsgroups: comp.sources.misc Subject: v**INF2: Index for comp.sources.misc, Volume1 through Volume7 Frequency: start of every volume, which is 1-3 months... From: kent@sparky.imd.sterling.com (Kent Landfield) Newsgroups: comp.sources.misc Subject: v**INF3: Index for comp.sources.misc, Volume8 through Volume14 Frequency: start of every volume, which is 1-3 months... From: kent@sparky.imd.sterling.com (Kent Landfield) Newsgroups: comp.sources.misc Subject: v**INF4: Index for comp.sources.misc, Volume15 through Volume** Frequency: start of every volume, which is 1-3 months... From: kent@sparky.imd.sterling.com (Kent Landfield) Newsgroups: comp.sources.misc Subject: v**INF5: Index of Patches posted to comp.sources.misc Frequency: start of every volume, which is 1-3 months.. From: mcgrew@dartagnan.rutgers.edu (Charles Mcgrew) Newsgroups: comp.sources.sun Subject: v**INF3: Location and format of ftp archive site Frequency: start of every volume, which is 3-6 months... From: rsalz@bbn.com (Rich Salz) Newsgroup: comp.sources.unix Subject: V**INF1: Introduction to comp.sources.unix Frequency: start of every volume, which is 3-6 months... From: rsalz@bbn.com (Rich Salz) Newsgroup: comp.sources.unix Subject: V**INF2: List of sources in the archive Frequency: start of every volume, which is 3-6 months... From: jik@athena.mit.edu (Jonathan I. Kamens) Subject: How to find sources (READ THIS BEFORE POSTING) Newsgroups: comp.sources.wanted,alt.sources.wanted Frequency: biweekly From: argv%island@uunet.uu.net (Dan Heller) Newsgroups: comp.sources.x Subject: v**INF1: README Frequency: start of every volume, which is 3-6 months... From: argv%island@uunet.uu.net (Dan Heller) Newsgroups: comp.sources.x Subject: v**INF2: Archive Listings Frequency: start of every volume, which is 3-6 months... From: argv%island@uunet.uu.net (Dan Heller) Newsgroups: comp.sources.x Subject: v**INF3: patchlogs Frequency: start of every volume, which is 3-6 months...

From: std-unix@uunet.uu.net (Moderator, John S. Quarterman)

Newsgroups: comp.std.unix

Subject: Access to UNIX-Related Standards

Frequency: bi-monthly

From: std-unix@uunet.uu.net (Moderator, John S. Quarterman)

Newsgroups: comp.std.unix

Subject: Calendar of UNIX-related Events

Frequency: monthly

From: std-unix@uunet.UU.NET (Moderator, John S. Quarterman) Newsgroups: comp.std.unix,comp.org.usenix,comp.unix.questions

Subject: Access to UNIX User Groups

Frequency: bi-monthly

From: std-unix@uunet.UU.NET (Moderator, John S. Quarterman)
Newsgroups: comp.std.unix,comp.org.usenix,comp.unix.questions

Subject: Access to UNIX-Related Publications

Frequency: bi-monthly

From: ferry@chorus.fr (Ferry de Jong)
Newsgroups: comp.sys.amiga.introduction

Subject: Usage of comp.sys.amiga.* and Netiquette V*.*

Frequency: monthly

From: ferry@chorus.fr (Ferry de Jong)
Newsgroups: comp.sys.amiga.introduction

Subject: Amiga newsgroups under comp.sys.amiga.* V*.*

Frequency: monthly

From: ferry@chorus.fr (Ferry de Jong)
Newsgroups: comp.sys.amiga.introduction

Subject: Frequently Asked Questions and Answers V*.* (*** ****)

Frequency: monthly

From: unix-pc@zorch.sf-bay.org (Scott Hazen Mueller)

Newsgroups: comp.sys.att

Subject: Monthly posting about Unix-PC network

Frequency: monthly

From: raymond@math.berkeley.edu (Raymond Chen)

Newsgroups: comp.sys.ibm.pc.misc

Subject: Frequently Asked Questions: READ THIS BEFORE YOU POST

Frequency: monthly

From: geoff@pmafire.inel.gov (Geoff Allen)

Newsgroups: comp.sys.mac.announce

Subject: Answers to Frequently Asked Questions

From: geoff@pmafire.inel.gov (Geoff Allen)

Newsgroups: comp.sys.mac.announce Subject: About Macintosh Usenet Groups

Frequency: monthly

From: csn-announce@media.mit.edu Newsgroups: comp.sys.next.announce

Subject: FAQ-1/3: Answers to Frequently Asked Questions

Frequency: monthly

From: csn-announce@media.mit.edu Newsgroups: comp.sys.next.announce

Subject: FAQ-2/3: Answers to Frequently Asked Questions

Frequency: monthly

From: csn-announce@media.mit.edu Newsgroups: comp.sys.next.announce

Subject: FAQ-3/3: Answers to Frequently Asked Questions

Frequency: monthly

From: csn-announce@media.mit.edu Newsgroups: comp.sys.next.announce

Subject: FAQ-TOC: Answers to Frequently Asked Questions

Frequency: monthly

From: rgreene@ricecsvm.rice.edu (Bob Greene)

Newsgroups: comp.sys.sun

Subject: Monthly Intro Message

Frequency: monthly

From: bobby@hot.caltech.edu (Bobby Bodenheimer)

Newsgroups: comp.text.tex

Subject: Frequently Asked Questions about TeX, etc. - with Answers [Monthly]

Frequency: monthly

From: raymond@math.berkeley.edu (Raymond Chen)

Newsgroups: comp.text.tex

Subject: Supplementary TeX Information

Frequency: monthly

From: sahayman@iuvax.cs.indiana.edu (Steve Hayman)

Newsgroups: comp.unix.questions

Subject: Frequently Asked Questions about Unix - with Answers

Frequency: monthly

From: sahayman@iuvax.cs.indiana.edu (Steve Hayman)

Newsgroups: comp.unix.questions

Subject: Welcome to comp.unix.questions

Frequency: monthly

From: virtech!cpcahil@uunet.uu.net (Conor P. Cahill)

Newsgroups: comp.unix.sysv386 Subject: Welcome to comp.unix.sysv386 (AKA Frequently Asked Questions) Frequency: monthly From: jan@pandonia.canberra.edu.au (Jan Newmarch) Newsgroups: comp.windows.x.motif Subject: Frequently Asked Questions about Motif (Part * of *) Frequency: monthly From: xug@lta.com (X User's Group) Newsgroups: comp.windows.x Subject: Frequently Asked Questions about X with Answers */3 [long monthly posting] Frequency: monthly From: jbw@bigbird.bu.edu (Joe Wells) Newsgroups: gnu.emacs.help,comp.emacs Subject: GNU Emacs Frequently Asked Questions with Answers (part * of *) Frequency: monthly From: jbw@bigbird.bu.edu (Joe Wells) Newsgroups: gnu.emacs.help,comp.emacs Subject: GNU Emacs Frequently Asked Questions with Answers (differences) Frequency: monthly From: murray@sun13.scri.fsu.edu (John Murray) Newsgroups: misc.forsale Subject: Welcome to Misc.forsale - Frequently Asked Questions (please read!) Frequency: monthly From: sopwith!snoopy (Snoopy) Newsgroups: misc.jobs.misc, misc.jobs.offered, misc.jobs.resumes Subject: Welcome to misc.jobs! Frequency: monthly From: eugene@amelia.nas.nasa.gov (Eugene N. Miya) Newsgroups: misc.jobs.offered Subject: [1/m **/**] Read BEFORE posting: offered stylistic consensus Frequency: biweekly From: eugene@amelia.nas.nasa.gov (Eugene N. Miya) Newsgroups: misc.jobs.resumes Subject: [1/m **/**] Read BEFORE posting: Stylistic consensus on resumes Frequency: biweekly From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.admin Subject: Checkgroups message (with INET groups) Frequency: every 4-6 weeks From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.admin

Subject: Checkgroups message (without INET groups)

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)
Newsgroups: news.admin,news.announce.newusers

Subject: How to Get Information about Networks

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.admin,news.announce.newusers Subject: USENET Software: History and Sources

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers

Subject: A Primer on How to Work With the Usenet Community

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers

Subject: Answers to Frequently Asked Questions

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers

Subject: Emily Postnews Answers Your Questions on Netiquette

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers

Subject: Hints on writing style for Usenet

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers
Subject: Introduction to news.announce

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.lists,news.groups,news.announce.newusers

Subject: Regional Newsgroup Hierarchies

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers Subject: Rules for posting to Usenet

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers,news.groups,news.admin

Subject: How to Create a New Newsgroup

Frequency: every 4-6 weeks From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.announce.newusers,news.groups,news.admin Subject: How to Create a New Trial Newsgroup Frequency: every 4-6 weeks From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.announce.newusers,news.lists Subject: List of Periodic Informational Postings Frequency: every 4-6 weeks From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.lists,news.groups,news.misc Subject: Changes to Alternative Newsgroup Hierarchies Frequency: every 4-6 weeks From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.announce.newusers,news.admin Subject: What is Usenet? Frequency: every 4-6 weeks From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.announce.newusers,news.groups Subject: A Guide to Social Newsgroups and Mailing Lists Frequency: every 4-6 weeks From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.misc,news.groups Subject: Changes to A Guide to Social Newsgroups and Mailing Lists Frequency: every 4-6 weeks From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.misc Subject: Changes to Introduction to news.announce Frequency: every 4-6 weeks From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.misc Subject: Changes to Rules for posting to Usenet Frequency: every 4-6 weeks From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.admin,news.misc Subject: Changes to What is Usenet? Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.admin,news.misc

Subject: Changes to USENET Software: History and Sources

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.misc

Subject: Changes to Hints on writing style for Usenet

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)
Newsgroups: news.lists,news.groups,news.misc
Subject: Changes to List of Active Newsgroups

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.lists,news.admin

Subject: Changes to How to Construct the Mailpaths File

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.admin,news.misc

Subject: Changes to How to Get Information about Networks

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)
Newsgroups: news.lists,news.groups,news.misc

Subject: Changes to Regional Newsgroup Hierarchies

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)
Newsgroups: news.lists,news.groups,news.misc

Subject: Changes to List of Moderators

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)
Newsgroups: news.misc,news.groups,news.admin
Subject: Changes to How to Create a New Newsgroup

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.misc

Subject: Changes to A Primer on How to Work With the Usenet Community

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.misc

Subject: Changes to Answers to Frequently Asked Questions

Frequency: every 4-6 weeks

From: reid@decwrl.dec.com (Brian Reid)

Newsgroups: news.groups,news.lists,news.admin
Subject: USENET FLOW ANALYSIS REPORT FOR *** **

From: reid@decwrl.dec.com (Brian Reid)

Newsgroups: news.groups,news.lists,news.admin

Subject: USENET READERSHIP SUMMARY REPORT FOR *** **

Frequency: monthly

From: reid@decwrl.DEC.COM (Brian Reid)

Newsgroups: news.groups,news.lists,news.admin

Subject: arbitron data from these sites has expired

Frequency: monthly

From: newsstats@uunet.UU.NET

Newsgroups: news.lists

Subject: Top 25 News Groups for the last 2 weeks

Frequency: bi-weekly

From: newsstats@uunet.UU.NET

Newsgroups: news.lists

Subject: Top 25 News Submitters by Site by Kbytes for the last 2 weeks

Frequency: bi-weekly

From: newsstats@uunet.UU.NET

Newsgroups: news.lists

Subject: Top 25 News Submitters by Site by number of articles for the last 2 weeks

Frequency: bi-weekly

From: newsstats@uunet.UU.NET

Newsgroups: news.lists

Subject: Top 25 News Submitters by User by Kbytes for the last 2 weeks

Frequency: bi-weekly

From: newsstats@uunet.UU.NET

Newsgroups: news.lists

Subject: Top 25 News Submitters by User by number of articles for the last 2 weeks

Frequency: bi-weekly

From: newsstats@uunet.UU.NET

Newsgroups: news.lists

Subject: Total traffic through uunet for the last 2 weeks

Frequency: bi-weekly

From: reid@decwrl.dec.com (Brian Reid)

Newsgroups: news.lists

Subject: USENET FLOW ANALYSIS for *** **: Top 1000 sites

Frequency: monthly

From: reid@decwrl.DEC.COM (Brian Reid)

Newsgroups: news.lists

Subject: USENET Readership report for *** **

Frequency: monthly

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.lists,news.admin Subject: How to Construct the Mailpaths File Frequency: every 4-6 weeks From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.lists,news.announce.newusers Subject: Publicly Accessible Mailing Lists Part I Frequency: every 4-6 weeks From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.lists,news.announce.newusers Subject: Publicly Accessible Mailing Lists Part II Frequency: every 4-6 weeks From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.lists,news.announce.newusers Subject: Publicly Accessible Mailing Lists Part III Frequency: every 4-6 weeks From: reid@decwrl.dec.com (Brian Reid) Newsgroups: news.lists,news.groups Subject: BOTTOM 20 NEWSGROUPS IN ORDER BY POPULARITY (*** **) Frequency: monthly From: reid@decwrl.dec.com (Brian Reid) Newsgroups: news.lists,news.groups Subject: BOTTOM 20 NEWSGROUPS IN ORDER BY PROPAGATION (*** **) Frequency: monthly From: reid@decwrl.dec.com (Brian Reid) Newsgroups: news.lists,news.groups Subject: TOP 40 NEWSGROUPS IN ORDER BY AMOUNT OF CROSSPOSTING (*** **) Frequency: monthly From: reid@decwrl.dec.com (Brian Reid) Newsgroups: news.lists,news.groups Subject: TOP 40 NEWSGROUPS IN ORDER BY PER-READER COST (*** **) Frequency: monthly From: reid@decwrl.dec.com (Brian Reid) Newsgroups: news.lists,news.groups Subject: TOP 40 NEWSGROUPS IN ORDER BY POPULARITY (*** **) Frequency: monthly From: reid@decwrl.dec.com (Brian Reid) Newsgroups: news.lists,news.groups Subject: TOP 40 NEWSGROUPS IN ORDER BY TRAFFIC VOLUME (*** **) Frequency: monthly From: spaf@cs.purdue.EDU (Gene Spafford) Newsgroups: news.lists,news.groups,news.announce.newusers

Subject: Alternative Newsgroup Hierarchies

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.lists,news.groups,news.announce.newusers

Subject: List of Active Newsgroups

Frequency: every 4-6 weeks

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.lists,news.groups,news.announce.newusers

Subject: List of Moderators Frequency: every 4-6 weeks

From: reid@decwrl.dec.com (Brian Reid)

Newsgroups: news.lists.ps-maps,comp.sources.d,news.admin

Subject: "inpaths.c" (last updated *****)

Frequency: monthly

From: reid@decwrl.dec.com (Brian Reid)

Newsgroups: news.misc

Subject: USENET PostScript map *****

Frequency: monthly

From: reid@decwrl.DEC.COM (Brian Reid)

Newsgroups: news.misc,news.admin,misc.misc,news.groups Subject: USENET Readership summary for *** ** posted

Frequency: monthly

From: Bill Wohler <wohler@sap-aq.de>

Newsgroups: news.software.nn

Subject: NN Frequently Asked Questions (FAQ) with Answers

Frequency: monthly

From: nixpub@lgnp1.LS.COM (NIXPUB Coordinator)
Newsgroups: pubnet.nixpub,comp.misc,alt.bbs

Subject: Nixpub Posting (long)

Frequency: monthly

From: nixpub@lgnp1.LS.COM (NIXPUB Coordinator)
Newsgroups: pubnet.nixpub,comp.misc,alt.bbs

Subject: Nixpub Posting (short)

Frequency: monthly

From: conty@cbnewsl.att.com (Enrique Conty)

Newsgroups: rec.arts.anime

Subject: THE ANIME FREQUENTLY-ASKED-QUESTIONS LIST

Frequency: monthly

From: conty@cbnewsl.att.com (Enrique Conty)

Newsgroups: rec.arts.anime

Subject: THE ANIME RESOURCES LIST

Frequency: monthly

From: conty@cbnewsl.att.com (Enrique Conty)

Newsgroups: rec.arts.anime

Subject: WELCOME TO REC.ARTS.ANIME

Frequency: monthly

From: ecl@cbnewsj.att.com (Evelyn C. Leeper)

Newsgroups: rec.arts.books

Subject: Frequently Asked Questions List (rec.arts.books)

Frequency: quarterly

From: ecl@cbnewsj.att.com (Evelyn C. Leeper)

Newsgroups: rec.arts.books

Subject: Sherlock Holmes Booklist *.*

Frequency: quarterly

From: ecl@cbnewsj.ATT.COM (Evelyn C. Leeper)

Newsgroups: rec.arts.cinema Subject: Academy Award nominees

Frequency: annually

From: ecl@cbnewsj.ATT.COM (Evelyn C. Leeper)

Newsgroups: rec.arts.cinema Subject: Academy Award winners

Frequency: annually

:From: esti@tank.uchicago.edu (Paul A. Estin)

Newsgroups: rec.arts.comics

Subject: Welcome to Rec.arts.comics

Frequency: monthly

From: kilburn@cs.wisc.edu (Dora Kilburn)

Newsgroups: rec.arts.drwho

Subject: Frequently Asked Questions

Frequency: monthly

From: kilburn@cs.wisc.edu (Dora Kilburn)

Newsgroups: rec.arts.drwho

Subject: Doctor Who Episodes (monthly posting)

Frequency: monthly

From: dant@logos.wr.tek.com (Dan Tilque)

Newsgroups: rec.arts.sf-lovers Subject: WELCOME TO SF-LOVERS

Frequency: monthly

From: ecl@cbnewsj.att.com (Evelyn C. Leeper)

Newsgroups: rec.arts.movies

Subject: Frequently Asked Questions List (rec.arts.movies)

Frequency: quarterly

From: hackman@pnet51.orb.mn.org (Otto "Hack-Man" Heuer) Newsgroups: rec.arts.startrek Subject: Star Trek Actors' Other Roles Frequency: monthly From: trek-info@dweeb.fx.com (Jim Griffith - Moderator) Subject: Introduction to rec.arts.startrek.info Newsgroups: rec.arts.startrek.info Frequency: monthly From: trek-info@dweeb.fx.com (Jim Griffith - Moderator) Subject: Guidelines For Submitting Articles Newsgroups: rec.arts.startrek.info Frequency: monthly From: trek-info@dweeb.fx.com (Jim Griffith - Moderator) Subject: List of Upcoming Conventions Newsgroups: rec.arts.startrek.info Frequency: monthly From: ames!scubed!pnet51.orb.mn.org!hackman (-8 Otto "Hack-Man" Heuer 8-) Subject: FREQUENTLY ASKED QUESTIONS LIST Newsgroups: rec.arts.startrek.info Frequency: monthly From: cwayne@triton.unm.edu (Chris Wayne) Subject: Station List (*) Newsgroups: rec.arts.startrek.info Frequency: monthly From: mholtz@sactoh0.sac.ca.us (Mark A. Holtz) Subject: Star Trek TV List of Lists (*) Newsgroups: rec.arts.startrek.info Frequency: monthly From: trek-info@dweeb.fx.com (Jim Griffith - Moderator) Subject: Administrivia Newsgroups: rec.arts.startrek.info Frequency: every now and then From: welty@lewis.crd.ge.com (richard welty) Newsgroups: rec.autos, rec.autos.tech, rec.autos.sport Subject: Welcome to Rec.Autos.* Frequency: monthly From: iglesias@draco.acs.uci.edu (Mike Iglesias) Newsgroup: rec.bicycles Subject: Frequently Asked Questions for rec.bicycles Frequency: monthly From: sean@stout.ism.isc.com

Newsgroups: rec.guns Frequency: monthly

Subject: Posting guidelines for rec.guns

From: funny-request@looking.on.ca (Brad Templeton)

Newsgroups: rec.humor.funny

Subject: Editorial Policy on Offensive Jokes -- Monthly Posting

Frequency: monthly

From: funny-request@looking.on.ca (Brad Templeton)

Newsgroups: rec.humor.funny

Subject: Guidelines for Submissions -- Monthly Posting

Frequency: monthly

From: eugene@amelia.nas.nasa.gov (Eugene N. Miya)

Newsgroups: rec.backcountry

Subject: [1/m **/**] Distilled wisdom (1/6) disclaimer to remember and ethic

Frequency: monthly

From: eugene@amelia.nas.nasa.gov (Eugene N. Miya)

Newsgroups: rec.backcountry

Subject: [1/m **/**] Distilled wisdom (2/6) sources

Frequency: monthly

From: eugene@amelia.nas.nasa.gov (Eugene N. Miya)

Newsgroups: rec.backcountry

Subject: [1/m **/**] Distilled wisdom (3/6) learning

Frequency: monthly

From: eugene@amelia.nas.nasa.gov (Eugene N. Miya)

Newsgroups: rec.backcountry

Subject: [l/m **/**] Distilled wisdom (4/6) learning (2)

Frequency: monthly

From: eugene@amelia.nas.nasa.gov (Eugene N. Miya)

Newsgroups: rec.backcountry

Subject: [1/m **/**] Distilled non-wisdom (5/6) summary of past topics

Frequency: monthly

From: eugene@amelia.nas.nasa.gov (Eugene N. Miya)

Newsgroups: rec.backcountry

Subject: [1/m **/**] {under construction} (6/6)

Frequency: monthly

From: rsk@gynko.circ.upenn.edu (Rich Kulawiec)

Newsgroups: rec.boats.paddle

Subject: Frequently asked questions and answers [last updated */**/**]

Frequency: monthly

From: rsk@gynko.circ.upenn.edu (Rich Kulawiec)

Newsgroups: rec.boats.paddle

Subject: Whitewater outfitter/dealer address list (*/**/**) Frequency: monthly From: aem@mthvax.cs.miami.edu (a.e.mossberg) Newsgroups: rec.food.recipes Subject: MONTHLY: General Information [last updated ***] Frequency: monthly From: pals@inland.com (Randy Pals) Newsgroups: rec.games.ches Subject: FAQ: Answers to Frequently Asked Questions Frequency: monthly From: muir@postgres.berkeley.edu (David Muir Sharnoff) Newsgroups: rec.games.empire Subject: empire versions -- monthly posting Frequency: monthly From: funny-request@looking.on.ca (Brad Templeton) Newsgroups: rec.humor.funny Subject: Introduction to REC.HUMOR.FUNNY -- Monthly Posting Frequency: monthly From: Chuq Von Rospach <chuq@apple.com> Newsgroups: rec.mag.otherrealms Subject: Introduction to rec.mag.otherrealms Frequency: tri-weekly From: linimon@nominil.lonestar.org (Mark Linimon) Newsgroups: rec.music.bluenote Subject: Welcome to rec.music.bluenote! Frequency: monthly From: linimon@nominil.lonestar.org (Mark Linimon) Newsgroups: rec.music.bluenote Subject: Rec.music.bluenote: history, common topics, frequently asked questions Frequency: monthly From: bill@flutter.tv.tek.com (William K. McFadden) Newsgroups: rec.music.makers,rec.audio Subject: LIST OF MUSICAL INSTRUMENT SPEAKERS Frequency: monthly From: rsk@gynko.circ.upenn.edu (Rich Kulawiec) Newsgroups: rec.music.makers,rec.music.bluenote Subject: Listing of open club jam sessions as of */*/* Frequency: monthly From: rsk@gynko.circ.upenn.edu (Rich Kulawiec)

Newsgroups: rec.music.makers,rec.music.synth Subject: Music Equipment Mail/Phone List

171

Frequency: monthly From: datta@vacs.uwp.wisc.edu (Dave Datta) Newsgroups: rec.music.cd, rec.music.misc Subject: Frequently Asked Questions Frequency: Monthly or if more than 3 of the questions are posted. From: datta@vacs.uwp.wisc.edu (Dave Datta) Newsgroups: rec.music.cd, rec.music.misc Subject: List of musical stores/clubs Frequency: Monthly From: prince@pawl.rpi.edu (Ron Buckmire) Newsgroups: rec.music.misc Subject: Billboard Top 10 Frequency: weekly From: eerke@cs.kun.nl (Eerke Boiten) Newsgroups: rec.music.misc Subject: Dutch Top 10 (singles) Frequency: weekly From: eerke@cs.kun.nl (Eerke Boiten) Newsgroups: rec.music.misc Subject: Dutch Top 10 (albums) Frequency: weekly From: owen@euclid.enet.dec.com (Steve Owen) Newsgroups: rec.music.misc,alt.rock-n-roll Subject: List of Musical Mailing Lists Frequency: monthly, or as heavy changes require From: rsk@gynko.circ.upenn.edu (Rich Kulawiec) Newsgroups: rec.music.misc,rec.arts.sf-lovers Subject: SF-references-in-music List Frequency: annually From: ralph@mtunq.att.com (Ralph Brandi) Newsgroups: rec.radio.shortwave Subject: Welcome to rec.radio.shortwave (Introduction) Frequency: monthly From: ralph@mtunq.att.com (Ralph Brandi) Newsgroups: rec.radio.shortwave Subject: Welcome to rec.radio.shortwave (Scanners) Frequency: monthly

Frequency: monthly

From: ralph@mtunq.att.com (Ralph Brandi)

Subject: Welcome to rec.radio.shortwave (Shortwave)

Newsgroups: rec.radio.shortwave

From: hooppoll@terminus.UUCP (Basketball Poll) Newsgroups: rec.sport.basketball Subject: Basketball poll Frequency: weekly during college basketball season From: hooppoll@terminus.UUCP (Basketball Poll) Newsgroups: rec.sport.basketball Subject: NCAA Division I-A Team list Frequency: weekly during college basketball season From: footpoll@terminus.UUCP (Football Poll) Newsgroups: rec.sport.football Subject: Football poll Frequency: weekly during college football season From: footpoll@terminus.UUCP (Football Poll) Newsgroups: rec.sport.football Subject: NCAA Division I-A Team list Frequency: weekly during college football season From: eugene@amelia.nas.nasa.gov (Eugene N. Miya) Newsgroups: rec.travel Subject: Simple suggestions for travel (net reminders really) Frequency: three times a year From: roche@cs.rochester.edu (Jim Roche) Newsgroups: rec.woodworking Subject: Frequently Asked rec.woodworking questions (last updated */*/*) Frequency: monthly From: roche@cs.rochester.edu (Jim Roche) Newsgroups: rec.woodworking Subject: Changes to Frequently Asked rec.woodworking questions (last updated */*/*) Frequency: monthly From: roche@cs.rochester.edu (Jim Roche) Newsgroups: rec.woodworking Subject: List of Frequently Requested rec.woodworking addresses (last changed */*/*) Frequency: monthly

From: roche@cs.rochester.edu (Jim Roche)

Newsgroups: rec.woodworking

Subject: Changes to List of Frequently Requested rec.woodworking addresses (last

changed */*/*)
Frequency: monthly

From: roche@cs.rochester.edu (Jim Roche)

Newsgroups: rec.woodworking

Subject: Frequently Requested Tool reviews (last changed */*/*)

From: alopeziz@maytag.uwaterloo.ca (Alex Lopez-Ortiz)

Newsgroups: sci.math

Subject: Frequently Asked Questions

Frequency: biweekly

From: military@cbnews.att.com (Bill Thacker)

Newsgroups: sci.military

Subject: How to Post to the sci.military Newsgroup

Frequency: monthly

From: military@cbnews.att.com (Bill Thacker)

Newsgroups: sci.military

Subject: sci.military guidelines and etiquette

Frequency: monthly

From: wollman@griffin.uvm.edu (Garrett A. Wollman)

Newsgroups: sci.space,alt.tla

Subject: Three-Letter Acronym (TLA) Update Program (UP)

Frequency: monthly

From: eugene@amelia.nas.nasa.gov (Eugene N. Miya)

Newsgroups: sci.space

Subject: [1/m **/**] Reminders for Old Farts

Frequency: monthly

From: eugene@amelia.nas.nasa.gov (Eugene N. Miya)

Newsgroups: soc.culture.japan

Subject: [1/m **/**] A point of reference for s.c.j.

Frequency: monthly

From: mludwig@bonnie.ics.uci.edu (Michael Ludwig)

Newsgroups: soc.net-people

Subject: Tips on using soc.net-people [1/m **/**]

Frequency: monthly

From: tp@mccall.com
Newsgroups: vmsnet.admin

Subject: Monthly checkgroups posting

Frequency: monthly

From: tp@mccall.com

Newsgroups: vmsnet.announce.newusers,comp.os.vms Subject: Monthly info posting: What is VMSnet?

Frequency: monthly

From: tp@mccall.com

Newsgroups: vmsnet.announce.newusers,comp.os.vms Subject: Monthly info posting: VMSnet on Bitnet

From: tp@mccall.com

Newsgroups: vmsnet.sources.d,comp.os.vms

Subject: Monthly info posting: vmsnet.sources archive sites

Regional Newsgroup Hierarchies

Xref: blister news.lists:184 news.groups:7461 news.announce.newusers:66

Path: blister!jtsv16!torsqnt!news-

server.csri.toronto.edu!rpi!think.com!samsung!news.cs.indiana.edu!purdue!uunet.uu.net

From: asp@uunet.uu.net (Andrew Partan)

Newsgroups: news.lists,news.groups,news.announce.newusers

Subject: Regional Newsgroup Hierarchies Summary: Describes 128 regional hierarchies Message-ID: <15405@ector.cs.purdue.edu>

Date: 25 Jul 91 23:16:05 GMT Expires: 23 Oct 91 23:16:04 GMT Sender: spaf@cs.purdue.EDU Followup-To: asp@uunet.uu.net

Lines: 2138

Approved: spaf@cs.purdue.EDU

Supersedes: <14701@ector.cs.purdue.edu>

Original-from: asp@uunet.uu.net (Andrew Partan)

[Most recent change: 15 Mar 1991 by asp@uunet.uu.net (Andrew Partan)]

Introduction

There are a large number of regional hierarchies of newsgroups. Most are very low volume. The only high volume hierarchy that I know of is fj.*.

Where known, I have tried to list someone who *may* know more about the hierarchy than I do.

Note that the "uunet" service carries most of these hierarchies. Contact uunet!uunet-request for subscription details.

Also note -- the lists in this article are totally unofficial and possibly incomplete or inaccurate. I try to keep the lists up-to-date, but make no guarantee that any of the information contained corresponds with the named groups in any significant way. Corrections and comments should be mailed directly to me (asp@uunet.uu.net, uunet!asp).

This list is not for internal newsgroups that should not been seen outside of your organization or university. If any newsgroups are listed here that should not be, please let me know & they will be removed from the next posting of this list.

The following newsgroups have either changed or been added since the last posting:

ba houston north scot ucb

```
bln
       hut
                       sdnet
                                  uch
ca
       info
                   nyc
                          sfnet
                                      uiuc
can
       kc
               nynex
                          slo
                                  uk
capdist la
                   oh
                          srcext
                                      upenn
cos
       mcnc
                   ont
                          stgt
                                      ut
dfw
       mi
                       sub
               ра
                              UW
dn
       mn
               pdx
                       swnet
                                  uxa
dnet
           nbg
                   pgh
                          triangle
                                      yale
eunet
           ncsc
                       phl
                              tub
                                      york
fj
                   princeton
       netmbx
                              tue
                                      zer
fl
       nil
               purdue
                          tut
fnet
                          tx
           nj
                   qtp
fub
       nlnet
                   rpi
                          uberlin
This list contains the following hierarchies:
ab
       dtek
                   milw
                              ott
                                      triangle
       duke
                   mit
al
                           ра
                                  tub
athena
       edm
                   mn
                          pdx
                                  tue
atl
       essug
                   mtl
                                  tut
                          pgh
aus
       eunet
                   nbg
                           phl
                                  tx
                                      uberlin
austin
                   ncsc
       fj
                              pnw
ba
       fl
               ne
                       princeton
                                  UC
bln
       fnet
                   netmbx
                              purdue
                                          ucb
boulder
       fub
                   nil
                           qtp
                                  uch
bu
               nj
                       rpi
                              uchi
       ga
ca
       gbg
               nlnet
                          sac
                                  udel
       houston
can
                   nmsu
                              sat
                                      uiuc
capdist
           hsv
                   ΠO
                                      uk
                           scot
chi
       hut
               nordunet
                          SCTUZ
                                      upenn
chv
       info
                   north
                              sdnet
                                          ut
cle
       kc
               nwu
                       seattle
                                  utc
CO
       ks
               Πy
                       sfnet
                                  utcs
                       slo
COS
       kw
               nyc
                             UW
CSU
       la
               nynex
                          srcext
                                      uxa
cth
       lou
               ΝZ
                       stgt
                                  va
       ls
                       stl
CU
               oau
                            wi
                                  yale
dc
       math
                   OC
                          sub
dfw
       mcnc
                   oh
                           swnet
                                      york
dk
       melb
                   ok
                           tba
                                  zer
dn
       mhk
               ont
                       tn
dnet
                          tor
       mi
                  ОГ
Ab
Newsgroups in Alberta, Canada.
               Items of general interest in Alberta, Canada.
ab.general
ab.jobs
               Jobs in Alberta, Canada.
```

```
Al
Newsgroups in Alabama, USA.
<no listed newsgroups.>
Athena
-----
Newsgroups at Project Athena, MIT, Cambridge, MA, USA. For more
information, you can try contacting S. Tucker <sst@ATHENA.MIT.EDU> or
ambar@athena.mit.edu.
athena.forsale
                    Items for sale at MIT's Project Athena.
athena.housing
                    Housing at MIT's Project Athena.
athena.misc
                Misc. at MIT's Project Athena.
athena.test
                Testing at MIT's Project Athena.
A†1
Newsgroups in Atlanta, Georgia, USA.
atl.general
                Items of General interest in Atlanta, GA.
atl.jobs
                Jobs in Atlanta, GA.
atl.olympics
                    The Olympics in Atlanta, GA.
                Resumes in Atlanta, GA.
atl.resumes
atl.test
                Testing in Atlanta, GA.
Aus
Newsgroups in Australia. For more information, you can try contacting
Robert Elz <kre@munnari.oz.au>.
aus.aarnet
                [Australian]
aus.acsnet
                Discussions of ACSnet (incl bug reports) [Australian]
                AI discussions [Australian]
aus.ai
                    Descriptions of public access archives in Australia.
aus.archives
aus.auuq
                AUUG Inc - Australian Unix User Group [Australian]
                    Planes, gliders, flying, etc. [Australian]
aus.aviation
                Push bikes [Australian]
aus.bicycle
aus.comms
                Discussion about Academic Network Proposal [Australian]
                    Misc computer types [Australian]
aus.computers
aus.computers.amiga Discussions about Commodore Amiga computers [Australian]
aus.computers.ibm-pc
                        Discussions about the IBM pc & clones [Australian]
                    Conservation issues. [Australian]
aus.conserve
aus.culture.china
                    China discussions. [Australian]
aus.films
                Movies, Cinema, TV [Australian]
aus.flame
                Abusive noise, posted by morons. [Australian]
aus.followup
                    Followups to aus.general & aus.wanted articles [Australian]
aus.footy
                ? [Australian]
aus.forsale
                Announcements of items for sale. [Australian]
                Fast Packet Switching [Australian]
aus.fps
```

aus.games Discussions of games. [Australian] aus.games.roleplay Discussions of role playing games. [Australian] General information, announcements, etc [Australian] aus.general Genstat Stats Package [Australian] aus.genstat Hi-Fi/Stereo stuff [Australian] aus.hi-fi aus.jobs Jobs available & wanted [Australian] Jokes, humour, and boring trivia [Australian] aus.jokes Discussions of why that joke was no good [Australian] aus.jokes.d aus.kermit The KERMIT file transfer protocol [Australian] aus.lp Logic Programming [Australian] The Apple Macintosh computer [Australian] aus.mac Mail systems, addressinc, &c [Australian] aus.mail ACSnet maps (Moderated) [Australian] aus.map aus.mbio Molecular biology [Australian] aus.music Music and related issues. [Australian] aus.netstatus Status of local & international net links [Australian] aus.news The news system [Australian] Parallel processing [Australian] aus.parallel [Australian] aus.photo aus.politics Politics, debates, rational(?) arguments. [Australian] aus.pyramid Pyramid computers [Australian] aus.radio Amateur Radio [Australian] aus.radio.amsat Amateur satellite radio [Australian] Discussions of, or related to, religions [Australian] aus.religion aus.scheme Scheme [Australian] Discussion of SF&F literature, media, fandom [Australian] aus.sf Sources [Australian] aus.sources South Pacific Educational & Research Net [Australian] aus.spearnet Sports. [Australian] aus.sport The S data analysis and graphics software [Australian] aus.stats.s Sun Workstations [Australian] aus.sun-works The TeX typesetting system [Australian] aus.tex Requests for sources, information, ... [Australian] aus.wanted Austin Newsgroups in Austin, Texas, USA. For more information, you can try contacting Fletcher Mattox <fletcher@cs.utexas.edu>. austin.followup Followups for Austin, TX. austin.forsale Items for sale in Austin, TX. austin.general Items of general interest in Austin, TX. austin.important Important issues in Austin, TX. austin.news News in Austin, TX. austin.talk Talk in Austin, TX. Ba Newsgroups in the Bay Area of California, USA. For more information, you can try contacting Nick Sayer <mrapple@quack.sac.ca.us> or checking out the ba.news.* newsgroups.

```
ba.announce
                Announcements of general interest to all readers. (Moderated)
                Bay Area restaurants and eating places.
ba.food
                Announcements of general interest to all readers.
ba.general
ba.internet
                Discussions about Bay Area Internet connectivity.
ba.market.computers For Sale/Wanted: Computers and software.
                    For Sale/Rent/Wanted: Housing, land, roommates.
ba.market.housing
ba.market.misc
                    For Sale/Wanted: Miscellaneous.
ba.market.vehicles For Sale/Wanted: Autos, cycles, trucks, etc.
ba.motss
                Newsgroup for Bay Area motss'ers.
ba.mountain-folk
                    Living in the hills and mountains around the Bay Area.
               Musical events in the Bay Area.
ba.music
                General issues of 'ba' Usenet administration.
ba.news
                    Announcments and discussion of Bay Area connectivity.
ba.news.config
ba.news.group
                    Meta-discussions about newsgroups in 'ba' distribution.
ba.news.stats
                    Bay Area USENET statistical and information postings.
ba.politics
                Political topics of interest to Bay Area readers.
                Announcements of Bay Area seminars.
ba.seminars
ba.singles
                Local newsgroup for single people.
ba.sports
                Discussion of sports in the Bay Area.
               Tests of 'ba' distribution. (Some sites autorespond.)
ba.test
ba.transportation Discussion of Bay Area transit/commute/driving issues.
ba.weather Weather in the Bay Area.
                   X windows discussion/help.
ba.windows.x
Bln
Newsgroups in some unknown place.
bln.general
Boulder
Newsgroups in Boulder, Colorado, USA.
                   Items of general interest to Boulder, CO.
boulder.general
Bu
Newsgroups at Boston University, Boston, MA. For more information, you
can try contacting Leonard (Len) H. Tower Jr. <tower@bu.edu>.
<BU is not listing its news groups.>
Ca
Newsgroups in California, USA.
               California freeways and backroads.
ca.driving
                    What's shakin' in California.
ca.earthquakes
                    Environmental concerns in California.
ca.environment
```

ca.environment.earthquakes

ca.general Of general interest to readers in Calfornia only.

ca.news USENET status and usage in California.

ca.news.group Existing or proposed newsgroups for 'ca' distribution. ca.politics Political topics of interest to California readers only.

ca.test Tests of 'ca' distribution articles.

ca.unix Unix discussion/help.

ca.wanted For Sale/Wanted postings throughout California.

Can

Newsgroups in Canada.

can.ai Artificial intelligence in Canada.

can.canet.d An open forum for discussion of CA*net topics. (Moderated)

can.francais About the Francophone population (in French).

can.general Items of general interest to Canadians.

can.jobs Jobs in Canada.

can.politics Canadian politics.

can.sun-stroke Sun Microsystems Users in Canada.
can.usrgroup Unix user group information in Canada.

can.uucp Canadian uucp problems.

can.uucp.maps Canadian UUCP maps are posted here. (Moderated)

Capdist

Newsgroups in the Capitol District (Albany area) of New York, in New York, USA. [Note: This is Capitol as in head city, not capital as in money.]

capdist.admin Administrative topics of capdist USENET. capdist.announce Announcements for the capdist area.

capdist.general General topic postings for the NY capitol district. capdist.misc Miscellaneous discussion topics in the capdist. capdist.seminars Conferences and seminars in the local area.

capdist.test For testing the capdist distribution.

Chi

Newsgroups in Chicago, Illinois, USA. For more information, you can try contacting Ron Heiby heiby@chg.mcd.mot.com.

chi.ai AI in Chicago.

chi.eats Group for discussion of Chicagoland restaurants.

chi.general General discussions, Chicago area, not forsale/wanted.

chi.mail Discussion of Chicago area email issues.

chi.places Group for announcements of Chicago area events.

chi.test USENET testing in Chicago.

chi.wanted Chicago area wanted and for-sale notices.

chi.weather Chicago area weather.

Chv Newsgroups in Charlottesville, Virginia, USA. chv.general For folks in Charlottesville, Virginia. Cle Newsgroups in Cleveland, Ohio, USA. For more information, you can try contacting Brandon Allbery. cle.general Items of general interest to Cleveland. Co Newsgroups in Colorado, USA. co.general Items of general interest to Colorado. co.test Testing in Colorado. Cos Newsgroups in Colorado Springs, Colorado, USA. cos.general Items of general interest in Colorado Springs, CO, USA cos.test Test group for Colorado Springs regional hierarchy Csu Newsgroups at Colorado State in Colorado, USA. For more information, you can try contacting news@ccncsu.colostate.edu. For student/local chapter of the ACM. csu.acm CSU.CS General CS department announcements. For computer science department grad students. csu.cs.grads Jobs available in the CS department. csu.cs.jobs csu.cs.labops Announcements for CS department lab operators. Announcements about CS systems/networks. csu.cs.systems For computer science department undergrads. csu.cs.undergrad csu.general General topics. Engineering computer network topics. csu.lance Department of agricultural/chemical engineering topics. csu.lance.ace csu.lance.atmos Department of atmospheric science topics. csu.lance.ce Department of civil engineering topics. csu.lance.ee Department of electrical engineering topics. csu.lance.es Department of engineering science topics. csu.lance.graphics Graphics topics within engineering. csu.lance.ieee For student/local chapter on the IEEE. csu.lance.me Department of mechanical engineering topics. csu.lance.news General engineering news. Extended discussions. csu.lance.talk

Text processing topics within engineering. csu.lance.text csu.test Local testing. Cth Newsgroups at the Chalmers University of Technology, in Gothenburg, Sweden. For more information, you can try contacting d9bertil@dtek.chalmers.se. cth.general general cth.test test messages Cu Newsgroups at the University of Colorado at Boulder, in Boulder, Colorado, USA. For more information, you can try contacting news@boulder.colorado.edu. Local/student chapter of the ACM cu.acm cu.applmath Applied math announcements/discussion cu.cs.clim ?? cu.cs.commonloops CommonLoops users discussion cu.cs.contest CS department programming contest announcements General CS department announcements/discussion cu.cs.general CS department announcements for grad students cu.cs.grads cu.cs.macl MacLisp users discussion cu.cs.ugrads CS department announcements for undergrads cu.diversity cu.ece.grads Engineering/Computer Engineering grad students cu.general General announcements and discussion cu.hpai ?? cu.ics ?? cu.math Math department announcements cu.mcdb Discussion about the Motif environment cu.motif-talk cu.netstat Statistics from CU campus network cu.nih.newsltr ?? Optical Computing? CU.OCS Sun Local User's Group cu.slug Local testing cu.test Local DEC hardware users discussion cu.users.dec Local TeX hardware users discussion cu.users.tex Local Ultrix software users discussion cu.users.ultrix cu.users.xwindows Local X-windows software users discussion Dc Newsgroups in Washington DC, USA (and the general metro area around Washington DC in Maryland and Virgina). dc.dining Dining in the Washington, DC area.

dc.forsale Items for sale in the Washington, DC area. Items of general interest to the Washington, DC area. dc.general dc.smithsonian Smithsonian related events in the Washington, DC area. dc.test Testing in the Washington, DC area. Dfw Newsgroups in Dallas/Fort Worth, Texas, USA. For more information, you can try contacting Greg Lewin <gary@mic.lonestar.org> or Mark Linimon <linimon@nominil.lonestar.org> or Doug Davis <doug@letni.lonestar.org>. Dining in Dallas/Fort Worth. dfw.eats dfw.flame Flaming in Dallas/Fort Worth. dfw.forsale Items for sale in Dallas/Fort Worth. dfw.general Items of general interest in Dallas/Fort Worth. dfw.news USENET in Dallas/Fort Worth. dfw.test Testing in Dallas/Fort Worth. Dk ---Newsgroups in Denmark. dk.foredrag 'foredrag' means lecture or presentation. dk.general gereral dk.kurser.dcomp courses in compurter communications?? dk.test test messages Dn Newsgroups in some unknown place. dn.supers dn.supers.disc Dnet Newsgroups in Germany, all in German. dnet.and.sub.general General information for dnet and subnet dnet.archiv dnet.atari Atari computers dnet.backbone-news (Moderated) dnet.checkgroups dnet.comp.pcs PC computers dnet.general General information for dnet dnet.graphik Graphics (Moderated) Group for D.A.R.C. = "Deutscher Amateur Radio Club" dnet.ham dnet.inet Networking/Internet Artificial intelligence (Moderated) dnet.mod-ki News/mail dnet.news USENET testing in dnet. dnet.test

dnet.witze Jokes dnet.xnet.general Dtek _ _ _ Newsgroups at the Chalmers University of Technology, Computer Technology, in Gothenburg, Sweden. For more information, you can try contacting d9bertil@dtek.chalmers.se. dtek.buggar about found bugs dtek.general general dtek.info information dtek.newsoft new software dtek.test test messages Duke ____ Newsgroups at Duke University, North Carolina, USA. For more information, you can try contacting Gregory G. Woodbury <ggw@cs.duke.edu>. duke.csdept Computer Science Department duke.general Duke University General duke.hacker programming and hardware topics duke.systems system admin notices duke.vlsi VLSI topics Edm ___ Newsgroups in Edmonton, Alberta, Canada. edm.general Items of general interest in Edmonton, Alberta, Canada. edm.usrgrp Unix Users Group in Edmonton, Alberta, Canada. Essug Newsgroups for the ESS User Group. essug.copt ESS User Group essug.misc ESS User Group essug.telco ESS User Group Eunet Newsgroups in Europe. For more information, you can try contacting Piet Beertema <piet@cwi.nl> or Daniel Karrenberg <dfk@mcsun.eu.net>. Bug reports on 4.*bsd, limited (EUnet) "audience". eunet.bugs.4bsd eunet.bugs.uucp Bug reports on uucp, specifically EUUG uucp. eunet.checkgroups Only for central posting of checkgroups messages. (Moderated) eunet.esprit Discussion/info about Esprit projects.

```
eunet.esprit.eurochip
                        Esprit VLSI Design - Eurochip.
                    EurOpen-related topics, announcements, etc.
eunet.europen
eunet.jokes
                Jokes only Europeans can (do?) understand...:-)
eunet.micro.acorn
                    Discussion about Acorn micros.
eunet.misc
                Miscellaneous discussions (replaces eunet.general/followup).
                    Announcements of new products of European interest.
eunet.newprod
                Group for news topics, limited to EUnet.
eunet.news
                    Discussion on and proposals for new eunet newsgroups.
eunet.news.group
                    (European) political discussions (and flames!).
eunet.politics
                    EUnet-wide (only!) group for posting sources.
eunet.sources
                EUnet-wide test group.
eunet.test
                Workstations (specifically European) topics.
eunet.works
Εj
Newsgroups in Japan. Most of the discussion in these newsgroups is
carried on in Kanji and you need a Kanji newsreader to be able to read
them. For more information, you can try contacting
news@icsts1.osaka-u.ac.jp.
                Artificial intelligence discussions.
fj.ai
                General announcements of interest to all. (Moderated)
fj.announce
fj.binaries.mac
                    Encoded Macintosh programs in binary.
fj.binaries.misc
                    Encoded programs in binary not covered elsewhere.
fj.binaries.msdos
                    Encoded MS-DOS programs in binary.(Moderated)
fj.binaries.msdos.d Topics on softwares posted to fj.binary.msdos .
                Books of all genres, shapes, and sizes.
fj.books
fj.comp.arch
                    Computer architecture.
fj.comp.comm
                    Discussion about software & hardware for communications.
fj.comp.image
                    Computer graphics, art, animation, image processing.
fj.comp.misc
                    General topics about computers not covered elsewhere.
fj.comp.music
                    Topics about computers and music.
fj.comp.oops
                    Object Oriented Programming, System, etc.
                    Discussion about parallel computing.
fj.comp.parallel
                    Printers, hardware & software.
fj.comp.printers
fj.comp.texhax
                    Discussion about TeXhax and delivery of mailing list.
fj.comp.text
                    Text processing issues and methods.
                    EMACS editors of different flavors.
fi.editor.emacs
fi.editor.misc
                    Talk about editors.
fj.editor.sse
                    Discussion about SSE (Simple Screen Editor).
                Followups to articles in fi.general.
fj.followup
                Short, tasteful postings about items for sale.
fj.forsale
                *Important* and timely announcements of interest to all.
fj.general
fj.guide.admin
                    Junet guide for administrators. (Moderated)
fj.guide.general
                    Junet guide. Rules, Convention, etc. (Moderated)
fj.guide.newusers
                    Explanatory postings for new users. (Moderated)
fj.info-terms
                    All sorts of terminals.
fj.jokes
                Joke and humor.
fj.junet
                General discussion about JUNET itself.
fj.jus
                Information about JUS.
fj.kanakan.misc
                    Discussion about kana-kanji henkan.
```

```
fj.kanakan.wnn
                    Discussion about Wnn kana-kanji henkan system.
fj.kanji
                Discussion about Kanji.
fj.kermit
                Discussion about kermit package.
                Local area network hardware and software.
fj.lan
fj.lang.ada
                Discussion about Ada*.
fj.lang.c
                Discussion about C.
                    Discussion about Forth.
fj.lang.forth
                    Discussion about LISP.
fj.lang.lisp
fj.lang.misc
                    Different computer languages not specifically listed.
fj.lang.mod2
                    Discussion about Modula-2.
fj.lang.postscript PostScript language and related topics.
                    Discussion about PROLOG.
fj.lang.prolog
fj.lang.st80
                    Discussion about Smalltalk 80.
fj.lectures
                Informative talks given to the news readers.
fj.living
                Discussions about various things in daily life.
fj.mail
                Proposed new mail/network standards.
fj.mail-lists.apollo
                        Apollo workstation mailing list. (Moderated)
fj.mail-lists.common-lisp
                            Common lisp mailing list from ARPA. (Moderated)
fj.mail-lists.connectionist Connectionist mailing list. (Moderated)
fj.mail-lists.info-japan
                            Info-japan mailing list from ARPA. (Moderated)
fj.mail-lists.nihongo
                        Nihongo mailing list from ARPA. (Moderated)
fj.mail-lists.occam Occam mailing list from ARPA. (Moderated)
fj.mail-lists.parallel comp.parallel mailing list. (Moderated)
                        Reduce mailing list. (Moderated)
fj.mail-lists.reduce
fj.mail-lists.types Types mailing list from ARPA. (Moderated)
fj.mail-lists.x-window X window mailing list from ARPA. (Moderated)
                announce for conference, workshop, etc. Not-moderated.
fi.meetings
                Various discussions that there are no groups to match.
fj.misc
fi.net-people
                    Announcements, requests, etc. about people on the net.
fj.news.adm
                Comments directed to news administrators.
fj.news.b
                Discussion about B news software.
                    Postings of system down times and configuration change.
fi.news.config
fj.news.group
                    Discussions and lists of newsgroups.
fj.news.lists
                    News-related statistics and lists.
fj.news.map
                Various maps, including UUCP maps.
                    Discussions of network news on JUNET itself.
fi.news.misc
                    Postings of new site announcements.
fj.news.newsite
fj.news.sa
                Comments directed to system administrators.
fj.os.minix
                Discussion about the MINIX operating system.
fj.os.misc
                Discussion about operating systems not covered elsewhere.
fj.os.msdos
                Discussion about the MSDOS operating system.
fi.os.os9
                Discussion about the OS9 operating system.
fj.papers
                Papers of all genres.
fj.ptt
                Information about PTT.
fj.questions.junet
                    Questions especially about JUNET.
fj.questions.misc
                    Questions about miscellaneous subjects.
fj.questions.unix
                    Questions especially about UNIX.
fj.rec.aerospace
                    About aviation. Airplane, airsports,,,
fj.rec.animation
                    Discussion about animated movies.
fi.rec.autos
                    Automobiles, automotive products and laws.
fj.rec.av
                High fidelity audio and video components.
```

```
fj.rec.baseball
                    Discussion about baseball.
fj.rec.bikes
                    Motorcycles and Bicycles, related products and laws.
                    The funnies, old and new.
fj.rec.comics
                Food, wine, spirits, cooking, cookbooks, and recipes.
fj.rec.food
                    Discussion about games and computer games.
fj.rec.games
fi.rec.games.scores Personal best scores of games and computer games.
                topics about ham radio.
fj.rec.ham
fj.rec.idol
                General topics about idol.
                    Marine recreation. Diving, swimming, yachting,,,
fj.rec.marine
                Recreational/participant topics not covered elsewhere.
fj.rec.misc
                    Reviews and discussions of movies.
fj.rec.movies
                    Discussion about music.
fj.rec.music
fj.rec.music.classical Talk around classical music.
fj.rec.music.progressive
                            Talk around Progressive rock.
fj.rec.mystery
                    Talk about mystery.
fj.rec.photo
                    Topics about cameras and photographs.
fj.rec.rail
                Discussion about railway & railroad.
fj.rec.sf
                Discussion about science fiction.
fj.rec.sports
                    Topics about sports.
fj.rec.sports.football Talk around footballs.
fi.rec.sports.keiba About horseracing.
fj.rec.sports.prowrestling About prowrestling.
fj.rec.sports.ski
                    About skiing.
                    Traveling all over the world.
fj.rec.travel
                Talk about Television and its shows.
fj.rec.tv
fj.sci.astro
                    Discussion about stars, planets and comets.
fj.sci.lang
                Natural languages, communication, etc.
                Mathematical discussions and pursuits.
fj.sci.math
fj.sci.misc
                Discussions about sciences not covered elsewhere..
fj.soc.culture
                    Group about (japanese?) culture.
fj.soc.law
                Topics on Low and right.
                    Fairness , Right, etc. between women and men.
fj.soc.men-women
fj.soc.misc
                Socially-oriented topics not covered elsewhere.
fj.soc.tech
                Topics on society and technology .
                For the posting of software packages & documentation.
fj.sources
                    For any discussion of source postings.
fj.sources.d
fj.sources.mac
                    Software for the Apple Macintosh.
fj.std
                Discussion about various standards.
fj.sys.famicom
                    Discussion about Nintendo's Family Computer.
fj.sys.j3100
                    Discussion about TOSHIBA's J3100-family computers.
fj.sys.mac
                Discussion about the Apple Macintosh & Lisa.
fj.sys.misc
                Discussion about computers of all other kinds.
fj.sys.news
                Discussion about SONY NEWS workstation.
fj.sys.next
                NeXT workstation and related topics.
fj.sys.pc98
                Discussion about NEC's PC-9800 & other computers.
fj.sys.sun
                Discussion about SUN workstation.
                    Discussion about Sharp's X-68000 & other computers.
fj.sys.x68000
fj.test
                Testing all over JUNET. Very boring.
                UNIX neophytes group.
fj.unix
                    Discussions, bug reports, and fixes on and for UNIX.
fj.unix.wizards
fj.wanted
                Requests for things that are needed.
```

```
fj.windows.gmw
                    GMW window systems.
fj.windows.misc
                    miscellaneous window systems.
fj.windows.x
                    About X window systems.
Fl
Newsgroups in Florida, USA. For more information you can try
contacting Andrew Mossberg <aem@mthvax.cs.miami.edu>.
                Important announcements for everyone in Florida.
fl.announce
fl.attractions
                    Florida attractions and entertainment.
                General computers in florida.
fl.comp
                Technical computer repair or modifications in Florida.
fl.comp.rep
fl.forsale
                Items for sale in Florida.
fl.general
                General topics in Florida.
fl.jobs
                The Florida job market.
fl.mail
                Mail systems, routers, paths .. in Florida.
                Map entries for Florida sites. (Moderated)
fl.map
fl.news
                News problems and features in Florida.
fl.sources
                Distribution of source code or documentation in Florida.
fl.test
                Testing workspace in Florida.
                Travel within Florida.
fl.travel
fl.uug
                UNIX user groups within Florida.
                Reviews and advice on restaurants in Florida.
fl.yumyum
Fnet
Newsgroups in France.
fnet.afuu
                Discussions concerning Association Francaise d'Utilisateurs Unix
fnet.c3
fnet.combinatoire
fnet.common-lp
fnet.culture
fnet.followup
                    Followups in France.
fnet.general
                    Items of general interest in France.
fnet.greco-prog
fnet.hypercubes
                French AI discussions
fnet.ia
fnet.lang
fnet.lelisp
fnet.sm90
fnet.sps9
fnet.test
                USENET testing in France.
Fub
Newsgroups in some unknown place.
fub.general
```

```
Ga
Newsgroups in Georgia, USA.
ga.forsale
                Items for sale in Georgia.
ga.general
                Items of general interest in Georgia.
ga.test
                Testing in Georgia.
Gbg
Newsgroups in Gothenburg, Sweden. For more information, you can try
contacting d9bertil@dtek.chalmers.se.
gbg.general
                general
Houston
Newsgroups in Houston, Texas, USA. For more information, you can try
contacting Stan Barber <sob@tmc.edu>.
                    Dining in Houston, TX.
houston.eats
houston.general
                    Items of general interest in Houston, TX.
houston.news
                    USENET in Houston, TX.
                    Personals for Houston, Texas.
houston.personals
houston.singles
                    Singles for Houston, Texas.
houston.test
                    Testing in Houston, Texas.
houston.wanted
                    Things wanted in Houston, TX.
Hsv
Newsgroups in Huntsville, Alabama, USA.
hsv.general
                Items of general interest in Huntsville, Alabama.
Hut
Newsgroups at Helsinki University in Finland.
<no listed newsgroups>
Info
Newsgroups in some unknown place.
info.slug
Кc
Newsgroups in the Kansas City metro area, Missouri, USA.
kc.misc
                Misc. postings in Kansas City.
```

kc.test USENET testing in Kansas City. Ks Newsgroups in Kansas, USA. ks.admin Administration in Kansas. ks.misc Misc postings in Kansas. Kw Newsgroups in Kitchener/Waterloo, Ontario, Canada. kw.bb.sale Things for sale kw.birthdays Happy birthday kw.cpsr KW branch of Computer Professionals for Social Responsibility kw.eats Restaurant reviews kw.forsale Things for sale kw.fun Fun stuff General information in Kitchener-Waterloo kw.general Rooms for rent kw.housing kw.jobs Job postings kw.micro Microcomputer discussion kw.microvax DEC microvax users Film reviews kw.movies kw.theatre Theatre reviews, etc kw.uucp Local uucp problems La Newsgroups in Los Angeles, California, USA. la.eats Dining in Los Angeles, CA. Items of general interest in Los Angeles, CA. la.general la.news USENET in Los Angeles, CA. la.seminars Seminars in Los Angeles, CA. la.sluq Los Angeles Sun Lover's User Group. la.test Testing in Los Angeles, CA. la.wanted Things wanted in Los Angeles, CA. Lou Newsgroups in Louisiana, USA. Items of general interest in Louisiana. lou.general lou.sun Suns in Louisiana. Ls Newsgroups in some unknown place.

```
ls.olnews
                ?? in ??
ls.ussr
               Postings on the Soviet Union???
Math
Newsgroups at the Chalmers University of Technology, Math Department,
in Gothenburg, Sweden. For more information, you can try contacting
d9bertil@dtek.chalmers.se.
math.general
                   general
math.news
               about news (math is a central nntpserver on cth)
Mcnc
Newsgroups at the MicroElectronics Center of North Carolina, USA. For
more information, you can try contacting Gregory G. Woodbury
<ggw@cs.duke.edu>.
mcnc.cad
mcnc.concert.video
mcnc.dcom
mcnc.general
                   general notes at MCNC.
mcnc.ncsulab
mcnc.pc
mcnc.programmers
mcnc.staff notes to the staff at MCNC.
                   system admin notices at MCNC.
mcnc.systems
mcnc.talks Seminars at MCNC.
mcnc.teleclass
mcnc.text
Melb
Newsgroups in Melbourne, Victoria, Australia.
melb.general
                   Items of general interest in Melbourne.
melb.seminars
                   Seminar announcements in Melbourne.
Mhk
Newsgroups in Manhattan, Kansas, USA.
mhk.forsale
               Items for sale.
mhk.talk.drivel
                   Trivia, flames, drivel.
mhk.talk.misc
                   Miscellaneous.
mhk.test
              Test messages.
Μi
Newsgroups in Michigan, USA. For more information, you can try
```

ls.amnesty

Amnesty International?? in ??

contacting Steve Simmons <scs@iti.org>, 1-313-769-4086. USENET maps in Michigan. mi.map mi.misc Catchall for Michigan. mi.news USENET news and mail discussions. Sun Microsystems products in Michigan. mi.sun Jobs and products, wanted and offered. mi.wanted Milw ____ Newsgroups in Milwaukee, Wisconsion, USA. milw.general Items of general interest in Milwaukee. MTT ___ Newsgroups at MIT, in Cambridge, Massachusetts, USA. For more information, you can try contacting Nick Papadakis <nick@lcs.mit.edu>. mit.bboard MIT's Bulletin Board. mit.test For mit.all test USENET news messages. Boring. Mn Newsgroups in Minnesota, USA. Archive sites in Minnesota. mn.archive Items of general interest to Minnesota. mn.general Minnesota uucp map postings. (Moderated) mn.map mn.net mn.sources Minnesota program sources. Testing in Minnesota. mn.test Minnesota USENET traffic statistics. mn.traffic For discussion of Unix Users of MN related topics. mn.uum Mtl Newsgroups in Montreal, Canada. mtl.general General stuff in Montreal. mtl.test USENET Testing in Montreal. Nbg Newsgroups in some unknown place. nbg.general Ncsc Newsgroups at the North Carolina Supercomputing Center. For more

```
information, you can try contacting Gregory G. Woodbury
<ggw@cs.duke.edu>.
ncsc.chemistry
                    ??
ncsc.general
                    NC Supercomputing general topics.
ncsc.training
                    ??
Ne
Newsgroups in the New England area of the USA. For more information,
you can try contacting Leonard (Len) H. Tower Jr. <tower@bu.edu>.
ne.food
                New England food and restaurant reviews.
ne.forsale
                Short postings on items for sale in New England.
ne.general
                New England general stuff.
                Short postings on housing wanted or available in NE.
ne.housing
ne.jobs
                New England job listings.
ne.nearnet.general Discuss the New England Academic and Research Network.
                    Technical operation and future of NEARnet.
ne.nearnet.tech
ne.news
                New England news (USENET) administration.
                    CRIMLUG discussion, the Southern NE Decus group.
ne.org.decus
                Discussio of NE political issues.
ne.politics
ne.seminars
                New England upcoming talks, seminars, etc.
                New England want-ads.
ne.wanted
Netmbx
Newsgroups in some unknown place. These might be in Germany.
netmbx.pc
Nil
Newsgroups in some unknown place.
nil.general
nil.maps
Nj
Newsgroups in New Jersey, USA.
nj.config
nj.events
                Events in New Jersey.
nj.followup
                Followups to items of general interest in New Jersey.
nj.forsale
                Items for sale in New Jersey.
                Items of general interest in New Jersey.
nj.general
                Housing in New Jersey.
nj.housing
nj.market.autos
nj.market.computers
nj.market.housing
```

nj.market.misc nj.misc nj.politics Politics in New Jersey. nj.test USENET Testing in New Jersey. nj.wanted New Jersey want ads. nj.weather Weather in New Jersey. Nlnet Newsgroups in the Netherlands. Conversation is usually in Dutch, but sometimes in English. nlnet.aio A discussion group for/about AIO's. nlnet.followup Follow-ups to nlnet.general should be posted here. nlnet.general General discussions of dutch interest. nlnet.misc Miscellaneous discussions of Dutch interest. nlnet.pico nlnet.test Test messages for nlnet (the Netherlands). Nmsu Newsgroups at New Mexico State University, in New Mexico, USA. computer center general announcements nmsu.cc.general computer center test nmsu.cc.test nmsu.crl.general computing research laboratory announcements nmsu.crl.ksg knowledge systems group in crl at nmsu nmsu.crl.nlp natural language processing group in crl at nmsu nmsu.crl.test crl test group nmsu.cs.ACM the acm student organization announcement group nmsu.cs.general general cs department announcements nmsu.cs.system cs department system announcements for uptime, etc. nmsu.forsale for sale at nmsu nmsu.general general announcements of interest at nmsu nmsu.unix.questions the novice's home for unix questioning No Newsgroups in Norway, mostly in Norwegian. For more information, you can try contacting Bjorn Larsen <bl@nac.no>. Discussion of the C programming language. no.c no.general Items of general interest in Norway. no.kjemi Chemistry. Discussion of network related things. no.net no.nuug Forum for the Norwegian Unix Users Group. Announcements of new, available software. no.sources.list no.sources.wanted Requests for software. no.test Testing the Norwegian News network. Discussion of the UNIX operating system. no.unix

Discussions of the X Window System from MIT.

no.x

```
Nordunet
Newsgroups for the Nordic University Net (Universities in Sweden,
Norway, Denmark, Finland, and possible Iceland?). For more
information, you can try contacting d9bertil@dtek.chalmers.se.
nordunet.apple-ip
nordunet.doc
                    documentation??
nordunet.ds
nordunet.followup followups
nordunet.general
                   general
nordunet.ietf
                   ??
nordunet.nucc
                   Nordic Universities Computer Clubs
nordunet.sources
                   sourcecode
nordunet.sources.list list of ditto
North
_____
Newsgroups in some unknown place. These might be in Germany.
north.market
Nwu
Newsgroups in some unknown place. This may be Northwestern University
in Chicago, Illinois, USA.
nwu.general Items of general interest in ??.
Ny
Newsgroups in New York, USA (for all of New York state - not just the
City).
               USENET Configuration in New York.
ny.config
ny.forsale
               Things for sale in NY.
ny.general
               Items of general interest in New York.
               Discussions about NY State Educ. Research Network.
ny.nysernet
                   NYSERNet maps.
ny.nysernet.maps
ny.nysernet.nysertech
                       NYSERNet related information.
ny.politics
               Politics in New York.
ny.seminars
               Seminars in New York.
               USENET news testing in New York.
ny.test
               New York want ads.
ny.wanted
Nyc
Newsgroups in some unknown place. This may be New York City.
nyc.announce
                    Announcements in ??
```

nyc.general Items of general interest in ?? nyc.test Testing in ?? Nynex -----Newsgroups in some unknown place. nynex.trd.eslab Nz Newsgroups in New Zealand. For more information, you can try contacting Mark Davies <mark@comp.vuw.ac.nz>. nz.archives Announcements of available software. nz.arts Discussion on the Arts. nz.comp Computing and computers. General information, announcements, etc nz.general nz.molbio Molecular Biology. Status of local & international net links nz.netstatus Recreation. nz.rec Social issues. NZ.SOC nz.soc.green Environmental issues. Requests for sources, information, ... nz.wanted 0au Newsgroups in Orlando, Florida, USA. oau.news Orlando FL news 0c Newsgroups in Orange County, California, USA. Orange County, CA ACM related information. oc.acm Items of general interest in Orange County, CA. oc.general oc.test Testing in Orange County, CA. 0h Newsgroups in Ohio, USA. oh.chem oh.general Items of general interest in Ohio, USA. oh.osc.software 0k Newsgroups in Oklahoma, USA. For more information, you can try contacting Mark Lawrence <mark@DRD.Com>.

ok.general Items of general interest in Oklahoma, USA. 0nt Newsgroups in Ontario, Canada. ont.archives Archives in Ontario, Canada. ont.conditions ont.events Ontario, Canada happenings. ont.followup Followups in Ontario, Canada. Items of general interest in Ontario, Canada. ont.general Jobs in Ontario, Canada. ont.jobs ont.micro Microcomputer related postings in Ontario, Canada. ont.sf-lovers Science Fiction Lovers in Ontario, Canada. ont.singles Singles in Ontario, Canada. ont.test Testing in Ontario, Canada. UUCP related postings in Ontario, Canada. ont.uucp 0г Newsgroups in Oregon, USA. or.forsale Oregon want ads. Items of general interest in Oregon. or.general or.test Testing in Oregon. 0tt Newsgroups in Ottawa, Canada. ott.general Items of general interest in Ottawa, Canada. ott.events Events in Ottawa, Canada. Pa Newsgroups in Pennsylvania, USA. For more information, you can try contacting Mark Weber <markw@gvl.unisys.com> or <gvlv2!markw>. pa.config USENET configuration for Pennsylvania pa.forsale Items for sale in Pennsylvania. pa.general Items of general interest in Pennsylvania. pa.test USENET testing in Pennsylvania. pa.wanted Items wanted in Pennsylvania. Pdx Newsgroups in Portland, Oregon, USA. For more information, you can try contacting Jeff Beadles <jeff@onion.pdx.com> or Doug Grant <anicon!doug>.

pdx.books Information about various books. Computing information. pdx.computing pdx.forsale Stuff for sale. pdx.games Talk about games. pdx.general General discissions pdx.golf Talk regarding golf. pdx.movies Talk regarding movies. pdx.music Talk regarding music. On-line information. (BBS's, Usenet access, etc.) pdx.online pdx.running Running information. pdx.singles Singles information. Sun Users group. pdx.slug Social events in Portland, Or. pdx.soc Sports in Portland, Or. pdx.sports Issues regarding telecommunications. pdx.telecom pdx.test Tests. pdx.utek Discissions regarding UTek, the Tektronix implimention of Unix. Pgh ___ Newsgroups in Pittsburgh, Pennsylvania, USA. pgh.food Food in Pittsburgh. Items of general interest in Pittsburgh. pgh.general pgh.next-users NeXT Users in Pittsburgh. pgh.test Testing in Pittsburgh. Ph1 Newsgroups in the Philadelphia, Pennsylvania, USA region, which includes northern Delaware and southern New Jersey. For more information, you can try contacting Mark Weber <markw@gvl.unisys.com> or <qvlv2!markw>. phl.announce Announcements of general interest in Philadelphia USENET configuration for Philadelphia phl.config Dance events, reviews and discussions phl.dance Restaurant information and reviews phl.food phl.forsale Items for sale in Philadelphia phl.misc Miscellaneous postings Musical events, reviews and discussions phl.music phl.outdoors Outdoor recreation - camping, hiking, parks phl.sports Sporting events and discussions phl.test USENET testing in Philadelphia phl.theatre Theatre events, reviews and discussions Items wanted in Philadelphia phl.wanted Pnw Newsgroups in the Pacific Northwest, Oregon/Washington, USA. For more information, you can try contacting Jeff Beadles <jeff@onion.pdx.com>.

pnw.forsale Things for sale. pnw.general General information. General news issues. pnw.news pnw.sys.sun Sun users. pnw.test Your vanilla test group. Princeton Newsgroups at Princeton University, in New Jersey, USA. For more information, you can try contacting usenet@princeton.edu. princeton.general Items of general interest to Princeton. princeton.grad Graduates of Princeton. Purdue Newsgroups at Purdue University. For more information, you can try contacting news@cc.purdue.edu, news@cs.purdue.edu, and/or news@ecn.purdue.edu. purdue.arpa-bboard Items forwarded from the Arpanet bboards. purdue.cc.amiga Amiga computer discussion purdue.cc.consult For the PUCC consulting staff. purdue.cc.consult.subs Substitutions requests, etc. for PUCC consultants. Announcement about the ETA-10P at PUCC purdue.cc.eta Items of interest for all PUCC hosts. purdue.cc.general purdue.cc.info-205 Discussion and information about the CDC Cyber 205. purdue.cc.log.hardware PUCC hardware changes purdue.cc.log.unix Logging of Unix system and program changes at PUCC purdue.cc.log.vm IBM system software changes at PUCC purdue.cc.log.vsos Cyber 205 software changes at PUCC purdue.cc.log.wkst Workstation lab software and hardware log at PUCC purdue.cc.news Announcements of system and program changes at PUCC. purdue.cc.newsletter Electronic publication of the PUCC newsletter (Moderate d) PUCC Personal Computer Learning Resource Center. purdue.cc.pclrc Discussion about the "S" statistical analysis system purdue.cc.s purdue.cc.suggest Responses to suggestions and comments. (Moderated) Testing PUCC connections. purdue.cc.test Discussion and information about the TeX system purdue.cc.tex Items of interest to all CS hosts. purdue.cs purdue.cs.acm Association for Computing Machinery purdue.cs.bboard CS department bulletin board. purdue.cs.news Announcements of system and program changes at CS. purdue.cs.seminar Announcements of seminars and colloquia at CS. purdue.cs.test Testing CS connections. purdue.dov Information on Data-Over-Voice technology purdue.ecn.aae Aero department announcements. purdue.ecn.asce American Society of Civil Engineers purdue.ecn.general Items of interest to all ECN hosts. purdue.ecn.news Logging of Unix system and program changes.

```
purdue.ecn.seminar Announcements of seminars and colloquia in engineering.
purdue.ecn.test
                    ECN news connection testing.
purdue.forsale
                    Advertisements for items for sale
purdue.framemaker
                    Discussion of FrameMaker software
                    Items of interest for all Purdue sites.
purdue.general
purdue.networks
                    Information and discussion about networking issues.
purdue.news
                Announcements of system and program changes at Purdue.
purdue.next
                Discussions and information about NeXT computers.
purdue.psych
                    Psychology department announcements
purdue.seminar
                    Purdue area seminar and colliquia announcements.
purdue.test
                Testing Purdue connections.
purdue.unix
                Questions and answers about unix systems.
purdue.windows
                    General discussion of windowing systems
purdue.windows.news Discussion of the NEWS windowing system
purdue.windows.sun Discussion of the Sun windowing system
purdue.windows.x
                    Discussion of the X windowing system
Qtp
Newsgroups in some unknown place.
qtp.bulletin
qtp.general
Rpi
Newsgroups at Rensselaer Polytechnic Institute, in Troy, New York,
USA. For more information, you can try contacting David C Lawrence
<tale@rpi.edu>.
rpi.acm
                RPI Chapter of the Association for Computing Machinery
rpi.announce
                    RPI Announcements of general interest
rpi.arts.animation Animation fans at Rennselaer.
rpi.beta-test.nim
                    Discussion and reports of NIM Version 4
rpi.courses.ai
                    Material related to the Introduction to AI course.
rpi.courses.compiler-design CS compiler design course.
                RPI Computer Science Dept.
rpi.cs
rpi.cs.grads
                    For graduates in CS.
rpi.cs.lab
                Announcements about software/hardware changes.
rpi.cs.labcom
                    The CS lab committee.
rpi.culture.indian For the Asian-Indian population at RPI.
                RPI Engineering Computing Systems Dept.
rpi.ecs
                Electronic Mail at Rensselaer.
rpi.email
rpi.forsale
                Items wanted and offered around campus.
rpi.general
                General RPI-wide discussions.
rpi.gnu
                GNU software at RPI.
                News and information about the ECSE Image Processing Lab.
rpi.ipl
                Information Technology Services.
rpi.its
                The Network Engineering Task Force.
rpi.net-eng
rpi.net-eng.announce
                        Annoucements from the NETF. (Moderated)
rpi.news
                USENET News at RPI.
```

rpi.rdrc Rensselaer Development Research Center. rpi.rumor Thoughts and Ideas about the future and present. Sun computers on campus. rpi.suns General social discussion. rpi.talk For testing USENET. rpi.test rpi.text.tex The TeX text processing language. X Window System on Rensselaer machines. rpi.windows.x Sac Newsgroups in Sacramento, CA, USA. For more information, you can try contacting Eric NiHill <eric@sactoh0.SAC.CA.US>. sac.general General talk group. sac.swap Sacramento For-Sale group. sac.test Test Posting Group. Sat Newsgroups in San Antonio, Texas, USA. For more information, you can try contacting Bruce Andreen <petro!bruce>. sat.announce General announcements of interest in San Antonio. Items of general interest in San Antonio. sat.general Miscellaneous postings in San Antonio. sat.misc Sources in San Antonio. sat.sources sat.test Testing in San Antonio. Scot Newsgroups in some unknown place. scot.general Scruz Newsgroups in Santa Cruz, California, USA. Events in Santa Cruz. scruz.events Items of general interest in Santa Cruz, California. scruz.general Sdnet Newsgroups in San Diego, California, USA. sdnet.cerfnet CerfNet issues in San Diego, California. sdnet.eats Things to eat in San Diego, California. sdnet.forsale Things for sale in San Diego, California. sdnet.general Items of general interest in San Diego, California. sdnet.jobs Jobs in San Diego, California. sdnet.talks Talks in San Diego, California.

```
sdnet.test
               USENET Testing in San Diego.
                    Items wanted in San Diego, California.
sdnet.wanted
Seattle
_____
Newsgroups in Seattle, Washington, USA.
seattle.general
                   Items of general interest in Seattle, Washington
Sfnet
_____
Newsgroups in Sweden. For more information, you can try contacting
Petri Ojala <ojala@cs.hut.fi>. sfnet.lists.* are imported mailing lists
are are not distributed outside of Sweden.
sfnet.akat.mtuki
sfnet.aloittelijoille
                       Uusien uutistenk{ytt{jien foorumi
sfnet.atk
               ATK-alan yleisk{ytt|inen p{{ryhm{
sfnet.atk.amiga
                    Commodore Amiga mikrotietokoneen k{ytt{j{t
sfnet.atk.atari
                    Atari mikromikrotietokoneen k{ytt{j{t
sfnet.atk.cpm
                   CP/M-k{ytt|j{rjestelm{n k{ytt{j{t
sfnet.atk.kerhot
                   ATK-alan kerhojen yhteyskanava
sfnet.atk.korkeakoulujen-mikrotuki Korkeakoulujen mikrotukikeskuksen tiedotuskanava
sfnet.atk.laitteet Kovosta kiinnostuneiden rautaista keskustelua
                    Apple Machintosh k{ytt{j{t
sfnet.atk.mac
                    Minix k{ytt|j{rjestelm{n harrastajat
sfnet.atk.minix
sfnet.atk.ms-dos
                   MS-DOS mikrojen k{ytt{j{t
                   TeX ladontaj{rjestelm{n asiantuntijoiden foorumi
sfnet.atk.tex
sfnet.atk.unix
                   Unix k{ytt|j{rjestelm{n k{ytt{j{t
sfnet.atk.vm
                    IBM VM/SP CMS k{ytt|j{rjestelm{n k{ytt{j{t
sfnet.atk.vms
                   DEC VMS k{ytt|j{rjestelm{n k{ytt{j{t
sfnet.csc
                TLP:n kyselykanava
sfnet.csc.tiedotukset
                      TLPn tiedotuskanava (Moderated)
sfnet.funet.tiedotukset FUNETin tiedotuskanava (Moderated)
sfnet.fuug.tiedotukset FUUGin tiedotuskanava (Moderated)
sfnet.fysiikka
                   Sekalaisia harrastuksia
sfnet.harrastus
sfnet.harrastus.astronomia T{htitieteen harrastajille (Moderated)
sfnet.harrastus.autot
                       tiell{liikkujien keskustelukanava
sfnet.harrastus.dx-kuuntelu
sfnet.harrastus.ham Radioamat||ritoiminnasta keskustelua
sfnet.harrastus.ham.info
                           Tiedotteita radioamat||reille (Moderated)
sfnet.harrastus.kulttuuri
                           Kulttuurinharrastajien keskustelukanava
sfnet.harrastus.kulttuuri.sf
                               Science Fiction harrastajat
sfnet.harrastus.partio
sfnet.harrastus.retkeily
                           Retkeily ja vaellus
sfnet.harrastus.ruoka+juoma Kulinaristien kohtauspaikka
sfnet.harrastus.sf
sfnet.harrastus.veneet Veneilynharrastajien oma kanava
sfnet.ieee
               IEEE:n Suomen osaston tiedoituskanava
sfnet.juoru
```

```
sfnet.keskustelu Sana on vapaa
sfnet.keskustelu.evoluutio Keskustelua evoluutiosta
sfnet.keskustelu.filosofia Filosofiasta kiinnostuneille
sfnet.keskustelu.huumori Kevennyst{ keskusteluun
sfnet.keskustelu.politiikka Yhteinen kanava yhteisille asioille
sfnet.keskustelu.uskonto
                           Uskokaa tai {lk{{
sfnet.keskustelu.uskonto.evoluutio
sfnet.keskustelu.varaventtiili Liikojen h|yryjen purkupaikka
sfnet.keskustelu.vitsit
sfnet.keskustelu.yhteiskunta
                               Yhteinen kanava yhteisille asioille
sfnet.maantiede
sfnet.matkustaminen Matkakertomuksia ja vihjeit{
                   Yleist{ keskustelua opiskelusta
sfnet.opiskelu
sfnet.opiskelu.sospsyk Sosiaalipsykologian opiskelijat
sfnet.ruoka+juoma
sfnet.ryhmat
sfnet.sorsat
sfnet.sources
sfnet.tapahtumat
                   Yleinen valtakunnallinen tapahtumakalenteri
sfnet.test
               Testiryhm{ uutisten toiminnan testaukseen yll{pit{jille
               Tieteenharjoittajien poikkitieteellinen p{{ryhm{
sfnet.tiede
sfnet.tiede.arkeologia Arkeologian tiedotus- ja keskustelukanava
sfnet.tiede.fysiikka
                       Fyysikkojen keskustelukanava
sfnet.tiede.hahmontunnistus Hahmontunnistajien keskustelukanava
sfnet.tiede.kemia
sfnet.tiede.kielitiede Kielitieteilij|iden keskustelukanava
sfnet.tiede.kirjastot Tieteelliset kirjastot
                       Kulttuurien tutkimus ja jatkokoulutus
sfnet.tiede.kulttutk
sfnet.tiede.maantiede
                       Maantieteilij|iden keskustelufoorumi
sfnet.tiede.matematiikka
                           Matemaatikot keskustelemassa
sfnet.tiede.nonlinear
                       Foorumi ep{lineaaristen ilmi|iden tutkijoille
sfnet.tiede.tietotekniikka Tietotekniikan tieteenharjoittajat
sfnet.tiede.tietotekniikka.tohtorix Tietotekniikan jatkokoulutus
sfnet.tiede.tilastotiede
                           Tilastotieteilij|iden avoin keskustelukanava
sfnet.tiede.tilastotiede.jatkokoulutus jatkokoulutusohjelma (Moderated)
sfnet.tiede.yt
sfnet.tiede.yt.info YT-INFO Yhteiskuntatieteilij|iden tapahtumakalenteri
sfnet.tiede.yt.kurssit YT-KURSS Sosiaalitieteiden jatkokoulutuskurssit
sfnet.tiede.yt.kvaltut YT-KVALI kvalitatiivisesta tutkimuksesta
sfnet.tiede.yt.laitokset YT-LAITO Sosiaalitieteiden jatkokoulutuslaitoksien
esittely{
sfnet.tiede.yt.metodit YT-METOD kvantitatiiviset menetelm{t
sfnet.tiede.yt.yleis YT-YLEIS Yhteiskuntatieteilij|iden Vapaa Sana
sfnet.tietoliikenne Tietoliikenteen keskustelu foorumi
sfnet.tietoliikenne.juoru
sfnet.tietoliikenne.katko Tietoa tietoliikenteen katkoista
sfnet.tietoliikenne.palvelimet Verkkojen julkiset palvelimet eli serverit
sfnet.tietoliikenne.ryhmat+listat
                                   Uudet ryhm{t ja listat
sfnet.tietoliikenne.tekniikka Tekninen verkkogurujen kohtauspaikka
sfnet.tietoliikenne.viestinviejat Viestien jakelukanavien yll{pito
sfnet.tohtorix
```

```
sfnet.tori
                Myynti, osto, vaihto, vuokraus ja lahjoitusilmoituksia
sfnet.uskonto.evoluutio
sfnet.yt
sfnet.yt.test
Slo
Newsgroups in some unknown place.
slo.stats
Srcext
_____
Newsgroups in some unknown place.
srcext.m3
Stgt
Newsgroups in some unknown place. These may be in Germany.
stgt.general
Stl
Newsgroups in St. Louis, Missouri, USA.
                General interest items for St. Louis sites.
stl.general
stl.jobs
                St. Louis job information.
stl.news
                St. Louis USENET information.
stl.rec
                St. Louis recreational information.
stl.test
                Testing in St. Louis.
Sub
Newsgroups in Germany, all in German. For more information, you can
try contacting Matthias Urlichs <urlichs@smurf.sub.org>.
sub.boerse
                Infos zu & Diskussion ueber Geld & Anlagen.
                SUB-Net Konfiguration: Neue Gruppen, neue Sites, etc.
sub.config
sub.config.lists
                    Fuer Statistiken (Moderated)
sub.config.maps
                    Mapdaten fuer Pathalias (Moderated)
sub.databases
                    Diskussion ueber Datenbanken
sub.games
                Spiele
sub.gateways
                    News- und Mail-Gateways zu anderen Netzen.
sub.general
                Allgemeine Themen, insbesondere zum SUB-Netz
                Diskussion ueber GNU's Not Unix-Software.
sub.gnu
sub.jokes
                Witze etc.
sub.jokes.d
                Diskussion ueber Witze.
sub.kultur
                Kulturelle Themen
sub.lists
                Kurze und lange Listen zu allen Themen.
```

```
sub.mag.chalisti Chalisti-Magazin (Moderated)
sub.mag.chalisti.d Diskussion ueber Artikel in der Chalisti.
sub.mail
                Adressierungs- und andere Mailprobleme.
sub.market
                Angebote/Gesuche
sub.misc
                Alles, was woanders nicht hinpasst
                    Infos und periodische Postings fuer neue User. (Moderated)
sub.newusers
                    Mitteilungen des AUGE e.V.
sub.org.auge
                Mitteilungen des CCC e.V.
sub.org.ccc
sub.org.sub
                Fuer Mitteilungen des sub-Netz e.V. (Moderated)
sub.os.minix
                    Minix-Betriebssystem
sub.os.misc
                Diverse Betriebssysteme (z.B. MVS, RTOS)
sub.os.os9
                OS-9/68000
                Fragen&Antworten zu Unix-Systemen (nicht Xenix).
sub.os.unix
                VAX/VMS
sub.os.vms
sub.os.xenix
                    Fragen&Antworten zu Xenix-Systemen.
sub.politik
                Politische Diskussionen
                    Diskussion sicherheitsrelevanter Thenem
sub.security
                Dreimal duerft ihr raten...
sub.sex
                    Programme fuer den Amiga (Moderated)
sub.sources.amiga
sub.sources.d
                    Sources-Diskussion, auch fuer Anfragen nach Software
                    Programme fuer MS-DOS, TOS, VMS etc. (Moderated)
sub.sources.misc
                    Programme fuer OS-9/68000 (Moderated)
sub.sources.os9
sub.sources.st
                    Programme fuer den Atari ST (Moderated)
                    Programme fuer UNIX/XENIX (Moderated)
sub.sources.unix
                Diskussion Studium, Studienbedingungen usw
sub.studium
sub.sys.amiga
                    Commodore Amiga
sub.sys.apple
                    Apple II/Macintosh
sub.sys.ibm
                IBMs und kompatible
sub.sys.misc
                    diverse Systeme
sub.sys.st
                Atari ST
sub.test
                Fuer Superschachteln und andere wichtige Tests
sub.tex
                Diskussion um und Codeschnipsel fuer TeX.
                Infos zu und sachliche Diskussion ueber Umweltfragen.
sub.umwelt
                Autos sowie umweltfreundlichere Verkehrsmittel.
sub.verkehr
Swnet
Newsgroups for the SUNET (Swedish University Net, subdivision of
NORDUNET). For more information, you can try contacting Bj|rn Eriksen
<ber@sunic.sunet.se>.
swnet.conferences
                    about conferences
swnet.followup
                    followups
swnet.general
                    general
swnet.info-gnu
                    ??
swnet.jobs
                help wanted :-)
swnet.lans
                ??
                    ??
swnet.lans.novell
swnet.mail
                mail admin
swnet.mail.map
                    mail map??
swnet.politik
                    Bitching about taxes
```

swnet.pryltorg (misc for sale) probably bogus (snus is tobacco that is chewed YUCC!) swnet.snus source code swnet.sources swnet.sources.list list of ditto swnet.sunet-info info about SUNET swnet.sys.amiga for those who have an amiga swnet.sys.dec or dec or ?? (unix clone??) swnet.sys.dnix swnet.sys.hp or hp swnet.sys.ibm.pc or IBM PC swnet.sys.mac or Mackintosh or ?? swnet.sys.ncr or ?? swnet.sys.pyramid swnet.sys.sun or Sun swnet.test test messages swnet.thermo swnet.unix unix in general swnet.wanted wanted ads. Tba Newsgroups in the Tampa Bay Area of Florida, USA. tba General tba.tuug Tampa UNIX Users Group Tn Newsgroups in Tennessee, USA. tn.flame Flames in Tennessee. Discussion of DOS related issues in Tennessee. tn.msdos Talk in Tennessee. tn.talk USENET Testing in Tennessee. tn.test Discussion of issues related to unix in Tennessee. tn.unix Tor Newsgroups in Toronto, Ontario, Canada. tor.general Items of general interest in Toronto, Canada. tor.jobs Jobs in Toronto. tor.news USENET in Toronto, Canada. tor.news.stats USENET Statistics in Toronto, Canada. tor.test Testing in Toronto, Canada. Triangle Newsgroups at Research Triangle in North Carolina, USA (defacto all of North Carolina). For more information, you can try contacting Gregory G. Woodbury <ggw@cs.duke.edu>.

triangle.csnet ?? triangle.forsale NC Want ads triangle.general general discussion in NC triangle.graphics NC Chapter of Natl Computer Graphics Assn Jobs offered and wanted in NC triangle.jobs triangle.libsci Notes of interest to libraries in NC reposts of Sun-Spots digest and SLUG in NC triangle.sun NC system admin notices triangle.systems Seminars and conferences notices in NC triangle.talks triangle.vlsi triangle.wizards local Cybermancers and friends in NC Tub Newsgroups in some unknown place. tub.general tub.wanted Tue Newsgroups at the Eindhoven University of Technology in the Netherlands. Conversation is usually in Dutch, sometimes in English. Miscellaneous discussions of local (Eindhoven) interest. tue.misc tue.test Test messages for tuenet (Eindhoven University of Technology). Tut Newsgroups at Tampere University in Finland. <no listed newsgroups> Tχ Newsgroups in Texas, USA. For more information, you can try contacting Fletcher Mattox <fletcher@cs.utexas.edu> or Mark Linimon <linimon@nominil.lonestar.org>. tx.evolution.vs.abortion tx.flame Texas flames. tx.followup Followups in Texas. tx.general Items of general interest in Texas. Jobs in Texas. tx.jobs tx.maps (Moderated) tx.news USENET in Texas. Politics in Texas. tx.politics tx.test Testing in Texas. tx.wanted Texas want ads.

Uberlin Newsgroups in some unknown place. uberlin.general Uc Newsgroups at the University of California, in California, USA. Items of general interest at the University of California. uc.general uc.motss Issues pertaining to homosexuality at Univ of California. University of California news. uc.news uc.test Testing for University of California. Ucb Newsgroups in some unknown place. This seem to be at the University of California at Berkeley. Housing at UCB. ucb.housing ucb.wanted Items wanted at UCB. Uch Newsgroups in some unknown place. uch.general Uchi Newsgroups at the University of Chicago, in Chicago, USA. information, you can try contacting Ellen Keyne Seebacher <news@midway.uchicago.edu>. uchi.ai Artificial intelligence at the University of Chicago. uchi.cogsci Cognitive science at the University of Chicago. uchi.cs-news.. Computer science newsgroups at the University of Chicago. uchi.emacs Emacs discussions at the University of Chicago. Items of general interest at the University of Chicago. uchi.general uchi.jobs Jobs newsgroups (discussion, ads, resumes) at the University of Chicago. uchi.mac Macintosh discussions at the University of Chicago. uchi.sun SUN computers of all types at the University of Chicago. uchi.supercomputing Supercomputing discussions at the University of Chicago. uchi.talks Visiting lecturers at the University of Chicago. uchi.test Test postings at the University of Chicago. uchi.tex TeX discussions at the University of Chicago. Ude1

Newsgroups at the University of Delaware, in Delaware, USA. udel.mlists Mailing lists from udel. Uiuc Newsgroups in some unknown place. These seem to be at the University of Illinois at Urbana. uiuc.classifieds Ads at ?? CS Dept general interest items?? uiuc.cs.general uiuc.general Items of general interest in ?? uiuc.gourmand Cooking at ?? uiuc.test Testing in ?? Uk Newsgroups in the United Kingdom. For more information, you can try contacting uknet@ukc.ac.uk. Announcements of UK wide interest. uk.announce Forthcoming events (conferences etc). uk.events uk.ikbs Discussion of Intelligent Knowledge Based Systems. Discussion about JANET IP service matters. (Moderated) uk.jips uk.jobs Situations vacant and wanted. Discussion of LISP; especially the draft standard. uk.lisp uk.misc General interest to everyone on UKnet. uk.net.maps UKnet maps. uk.net.news UKnet news. uk.politics UK political discussion. uk.sources UK wide group for sources/reposts/requests. uk.test UK wide tests. uk.wic Discussion of Women in Computing. Upenn Newsgroups at the University of Penn. For more information you can try contacting Rich Kulawiec <rsk@hazel.circ.upenn.edu>. Announcements of network related events. upenn.announce Colloquia announcements for CIS. upenn.cis.collog upenn.cis.general General information and announcements for CIS. General information and announcements for grad students in CIS. upenn.cis.grad upenn.cis.graphics Discussions on computer graphics. upenn.cis.grasp GRASP lab announcements and discussions. upenn.cis.grasp.robot GRASP robot users discussion. upenn.cis.sml Discussion mailing list on standard ML. Written preliminary (PhD) exam discussion. upenn.cis.wpe Cognitive science announcements and discussion. upenn.cogsci General information and announcements for EE. upenn.ee upenn.ee.cad VLSI development tools.

upenn.forsale Items for sale. upenn.general General announcements and discussions. upenn.itg Penn's Interactive Technology Group. upenn.ling.general General information and announcements (linguistics). upenn.macintosh Discussions on the Macintosh computer system. upenn.maxvideo Discussions on the Maxvideo image processing system. upenn.neural-nets Announcements and discussions on neural networks. upenn.newgroups Local group creation messages. upenn.next Discussions on the NeXT computer system. upenn.psych.general General information and announcements (psychology). upenn.seas.eniac Announcements concerning the operation of eniac.seas.upenn.edu for SEAS. upenn.seas.general General information and announcements for SEAS. upenn.seas.gseg Graduate Student Engineering Group information and announcements for SEAS. upenn.systems.grad General information and announcements for graduate students in Systems. upenn.test Software testing. upenn.testm Software testing. Ut Newsgroups at the University of Texas, in Texas, USA. For more information, you can try contacting Fletcher Mattox <fletcher@cs.utexas.edu>. (Note: there is a namespace collision with ut.* at the University of Toronto in Toronto, Ontario, Canada). ut.ai Artificial intelligence at UTexas. ut.bizarre Bizarre happenings at UTexas. ut.flame Flames at UTexas. ut.followup Followups to ut.general. ut.general Items of general interest at UTexas. ut.jobs Job offerings and jobs wanted at UTexas. ut.stardate Stardates from MacDonald Observatory. Test postings at UTexas. ut.test Text processing at UTexas. ut.text Ut Newsgroups at University of Toronto, in Toronto, Ontario, Canada. (Note: there is a namespace collision with ut.* at the University of Texas, in Texas, USA). ut.16k Discussions on the National Semi 16000 series CPU. ut.chinese University of Toronto Chinese community. ut.dcs.ai Artificial Intelligence at the University of Toronto. ut.dcs.cscw Computer Supported Cooperative Work. ut.dcs.dbois Data Base / Office Information Systems. ut.dcs.general General messages from UofT Dept. of Computer Science. ut.dcs.gradnews Info for Graduates.

Discussion on VLSI research and instruction for EE.

upenn.ee.vlsi

```
ut.dcs.graphics
                    Graphics.
ut.dcs.hci
                Human-Computer Interaction.
                Numerical Analysis.
ut.dcs.na
ut.dcs.seminars
                    Seminars.
ut.dcs.systems
                    Systems.
ut.dcs.theory
                    Theory.
                Electrical Engineering.
ut.ee
ut.ee.ieee
                IEEE in EE.
ut.general
                General messages.
ut.software.tex
                    Use of TeX at University of Toronto.
ut.software.x-windows
                      Three guesses.
ut.supercomputer
                    Pray for the Cray.
ut.test
                Test messages.
                    System Administration of Unix sites at U. of Toronto.
ut.unix.sysadmin
ut.unix.user
                    Information for Unix users.
ut.vlsi
                Big Iron.
Utc
Newsgroups at the Computer Centre that serves Electical Engineering and
some other departments at the Chalmers University of Technology, in
Gothenburg, Sweden. For more information, you can try contacting
d9bertil@dtek.chalmers.se.
utc.info
                what's up on utc.
Utcs
Newsgroups at the University of Texas, Computer Science Department, in
Texas, USA. For more information, you can try contacting Fletcher
Mattox <fletcher@cs.utexas.edu>.
utcs.general
                    Items of general interest to UTexas CS Dept.
utcs.grad
                Graduate student forum at UTexas CS Dept.
utcs.graphics
                    Computer graphics at UTexas CS Dept.
utcs.jobs
                Job announcements at UTexas CS Dept.
utcs.lispm
                Lisp users mail list at UTexas CS Dept.
utcs.projects
                    Research projects at UTexas CS Dept.
utcs.talks
                Announcement of seminars and talks at UTexas CS Dept.
utcs.techreports
                    Technical reports maintained by UTexas CS Dept.
                UPE honor society at UTexas CS Dept.
utcs.upe
Uw
Newsgroups at the University of Waterloo, in Waterloo, Ontario,
Canada. (Note: there are namespace collisions with uw.* at the
University of Warwick in the UK, and with uw.* the University of
Washington in Washington, USA.)
uw.ai.learning
                    AI stuff
uw.asplos
                ???
```

uw.assignments for assignment coordination uw.ccng.general Computer Communications Network Group uw.ccng.system Computer Communications Network Group uw.cgl Computer Graphics Lab uw.cgl.software Computer Graphics Lab uw.cgl.system Computer Graphics Lab nobody uses Crays here, do they? uw.cray Computer Science uw.cs.dept Computer Science / Electrical Engineering uw.cs.eee uw.cs.faculty Computer Science uw.cs.general Computer Science uw.cs.grad Computer Science uw.cs.grad.topics Computer Science uw.cs.ugrad Computer Science UW.CSC Computer Science Club uw.dcs.courses Computing Services uw.dcs.news Computing Services uw.dcs.suggestions Computing Services ??? uw.dcs.watshine uw.dsgroup Data Structures uw.dsgroup.misc Data Structures uw.ee.grad Electrical Engineering uw.fass **FASS** uw.forsale Items forsale. uw.general whatever uw.gnu For GNU at WATERLU uw.harmony Harmony OS Institute for Computer Research uw.icr uw.icr.forum Institute for Computer Research uw.icr.hardware Institute for Computer Research uw.image-proc Image Processing Imprint, UW student newspaper uw.imprint uw.jsaw For Japanese Student Association of Waterloo uw.kin Kinesiology uw.lang languages LauRel OS uw.laurel uw.library Library uw.logic logic programming uw.lpaig Logic programming & Artificial Intelligence Group uw.lpaig.changes Logic programming & Artificial Intelligence Group uw.lpaig.system Logic programming & Artificial Intelligence Group uw.mail-list.csnet-forum mailing list uw.mail-list.fractals mailing list uw.mail-list.sun-managers mailing list Maple symbolic math software uw.maple uw.math.faculty Math Faculty uw.math.grad Math Faculty uw.mech.system Mechanical Engineering uw.mfcf.bugs Math Faculty Computing Facility uw.mfcf.gripe Math Faculty Computing Facility uw.mfcf.hardware Math Faculty Computing Facility

```
uw.mfcf.people
                    Math Faculty Computing Facility
uw.mfcf.software
                    Math Faculty Computing Facility
uw.mfcf.suggestions Math Faculty Computing Facility
uw.mfcf.system
                    Math Faculty Computing Facility
uw.mfcf.todo
                    Math Faculty Computing Facility
uw.minos
                MINOS project
                Multiprocessor Systems Group
uw.msq
uw.network
                ???
uw.os.research
                    OS research
uw.pami
                Pattern Analysis & Machine Intelligence
                Pattern Analysis & Machine Intelligence
uw.pami.bsd
                    Pattern Analysis & Machine Intelligence
uw.pami.gripe
uw.pami.system
                    Pattern Analysis & Machine Intelligence
uw.scicom
                Scientific Computing
uw.sd.grad
                Systems Design
uw.shoshin
                Shoshin project
uw.shoshin.changes Shoshin project
uw.shoshin.system
                    Shoshin project
                Statistics department
uw.stats
uw.sun-owners
                    for people who have Suns
                Sylvan project
uw.sylvan
                    Sylvan project
uw.sylvan.os
uw.sys.amiga
                    for people with Amigas
                    for people with Apollos
uw.sys.apollo
uw.sys.atari
                    for people with Ataris
                Sytek communication system
uw.sytek
                upcoming seminars
uw.talks
uw.test
                testing
uw.tex
                TEX text formatting
                    University Computing Committee
uw.ucc.fortrade
uw.unix
                arguments about Unix
                u-kernel and u-system
uw.usystem
uw.vlsi
                VLSI group
uw.vlsi.software
                    VLSI group
uw.vlsi.system
                    VLSI group
                people who have to use VMS
uw.vms
                watserv1 users
uw.watserv1
uw.watshine
                watshine users
uw.x-hints
                how to use X windows
                    how to use X windows
uw.x-windows
Uxa
Newsgroups in some unknown place.
uxa.general
uxa.test
Va
```

```
Newsgroups in Virginia, USA.
                For folks in Virginia.
va.general
va.test
                Testing in Virginia.
Wi
Newsgroups in Wisconsin, USA.
                Items for sale in Wisconsin.
wi.forsale
                Items of general interest in Wisconsin.
wi.general
Yale
____
Newsgroups at Yale University in New Haven, CT, USA. For more
information you can try contacting Morrow Long <long@cs.yale.edu>.
yale.ace-users
yale.ailocal
yale.alfl-bugs
yale.apollo
yale.celerity-users
yale.chinese
yale.cm-users
yale.cs-graduates
yale.cs-undergrads
yale.cs130
yale.cs170
yale.cs201
yale.cs210
yale.cs222
yale.cs223
yale.cs240
yale.cs260
yale.cs270
yale.cs322
yale.cs323
yale.cs366
yale.cs421
yale.cs426
yale.cs428
yale.cs429
yale.cs440
yale.cs470
yale.cs472
yale.cs524
yale.cs543
yale.cs560
yale.cs570
yale.cube-users
yale.department
```

```
yale.emacs-bugs
yale.emacs-users
yale.encore-users
yale.eng.general
yale.facility
yale.forum
yale.games
yale.general
yale.hp-users
yale.indexing
yale.mac-users
yale.majors
yale.multiflow-users
yale.na
yale.ncube-users
yale.pc-users
yale.rt-users
yale.sequent-users
yale.sun-users
yale.systems-people
yale.test
yale.tex-users
yale.theory
yale.unix
yale.wizards
yale.zoo-users
York
____
Newsgroups at the York University in Toronto, Ontario, Canada. For
more information, you can try contacting davecb@nexus.york.edu.
york.announce
                    Announcements at York University
york.general
                    Postings of general interest at York University
                    Big-lan mailing list.
york.ml.big-lan
york.ml.bind
                    Bind mailing list.
york.ml.canet-status-reports
                                Canet-status-reports mailing list.
york.ml.cmutcp
                    CMUtcp mailing list.
york.ml.future
                    Future mailing list.
york.ml.info-pmdf
                    Info-pmdf mailing list.
york.ml.namedroppers
                        Namedroppers mailing list.
york.ml.nn
                NN mailing list.
york.ml.onet-status-reports Onet-status-reports mailing list.
york.ml.openbook
                    Openbook mailing list.
                    PCM-dev mailing list.
york.ml.pcm-dev
york.ml.sun-managers
                        Sun-managers mailing list.
york.ml.texhax
                    Texhax mailing list.
Zer
Newsgroups in Germany. Contact terra@sol.north.de for more
```

```
information. Its distribtution mostly is based on some BBS-SW, but
frequently gatewayed into UUCP-News-SW.
zer.fundgrube.biete
zer.fundgrube.suche
zer.hannover
zer.hannover.allgemeines
zer.hannover.fundgrube
zer.hannover.veranstaltungen
zer.linksys.adressen
zer.linksys.aktuelles
zer.linksys.frauen
zer.linksys.frieden
zer.linksys.internationales.nahost
zer.linksys.osten.ddr
zer.linksys.osten.nordkorea
zer.linksys.osten.rumaenien
zer.linksys.umwelt.allgemein
zer.linksys.umwelt.atom
zer.linksys.umwelt.muell
zer.news
zer.rechtswesen.allgemein
zer.rechtswesen.arbeitsrecht
zer.rechtswesen.verkehrsrecht
zer.t-netz.gateway
zer.t-netz.im_kino
zer.test
zer.z-netz.amateurfunk
zer.z-netz.amiga.allgemein
zer.z-netz.amiga.programmieren
zer.z-netz.amiga.spiele
zer.z-netz.amiga.viren
zer.z-netz.artikel
zer.z-netz.atari.allgemein
zer.z-netz.atari.binaer
zer.z-netz.atari.programmieren
zer.z-netz.atari.spiele
zer.z-netz.atari.viren
zer.z-netz.c
zer.z-netz.datenschutz
zer.z-netz.dbase
zer.z-netz.diskussion
zer.z-netz.fragen+antworten
zer.z-netz.ibm.allgemein
zer.z-netz.ibm.binaer
zer.z-netz.ibm.programmieren
zer.z-netz.ibm.spiele
zer.z-netz.ibm.viren
zer.z-netz.kontakte
zer.z-netz.mac
zer.z-netz.medizin.allgemein
```

```
zer.z-netz.modula
zer.z-netz.news
zer.z-netz.points
zer.z-netz.politik
zer.z-netz.recht.allgemeines
zer.z-netz.religion
zer.z-netz.spionage
zer.z-netz.systeminfo
zer.z-netz.telecom.allgemein
zer.z-netz.telecom.btx
zer.z-netz.telecom.datex
zer.z-netz.telecom.fragen
zer.z-netz.telecom.fragen+antworten
zer.z-netz.telecom.modem
zer.z-netz.telecom.telefon
zer.z-netz.umweltschutz
zer.z-netz.uni.mailboxen
zer.z-netz.unix
zer.z-netz.verbrauchertips
zer.z-netz.verkehr
zer.z-netz.vorschlaege
```

How to Create a Trial Newsgroup

Xref: blister news.announce.newusers:72 news.groups:7463 news.admin:4318

Path: blister!jtsv16!torsqnt!news-

server.csri.toronto.edu!rpi!usc!elroy.jpl.nasa.gov!sdd.hp.com!news.cs.indiana.edu!purd

ue!looking.on.ca!brad
From: brad@looking.on.ca

Newsgroups: news.announce.newusers,news.groups,news.admin

Subject: How to Create a New Trial Newsgroup

Message-ID: <15413@ector.cs.purdue.edu>

Date: 25 Jul 91 23:16:19 GMT Expires: 23 Oct 91 23:16:19 GMT Sender: spaf@cs.purdue.EDU Reply-To: brad@looking.on.ca

Followup-To: news.announce.newusers

Lines: 398

Approved: spaf@cs.purdue.EDU

Supersedes: <14709@ector.cs.purdue.edu>

Original-from: brad@looking.on.ca (Brad Templeton)

[Most recent change: 04 Oct 1990 by brad@looking.on.ca (Brad Templeton)]

GUIDELINES FOR USENET GROUP CREATION (Trial Method)

(Note: This note describes a way of creating newsgroups that is somewhat different from the generally-accepted proposal/vote method. This method has not been universally accepted as a valid means of creating a group, nor do all sites carry the "trial" hierarchy. Groups created under this procedure may or may not be honored by all site administrators, and may not be listed in the monthly newsgroup list postings despite "approval" by this method. --spaf)

To create a group on USENET, you must objectively demonstrate to most USENET admins that the group under consideration is worth carrying on their machines, and thus by default to all of USENET.

One common method of performing this demonstration is to conduct a survey/vote. Another regular posting in this group describes that method.

Another method is to give the group a trial run in a smaller section of the to see how it does. This is described below.

(These are just guidelines. Other methods exist, and these guidelines have been written to be flexible. The real goal is that sentence above -- an objective demonstation that it's worth feeding the group, by default, to all of the many thousands of machines on USENET. What you see below is just one way that many people think is a good way of doing that.)

The trial.* hierarchy exists for new newsgroups that are being tried out. A new group can be created there, and read by readers of that subnet. The readership and other forms of response are then measured. At the end of the trial (up to 5 months) the readership of the group is evaluated, and it is calculated where it would fit into the whole of USENET. If it meets the criterion, it is moved into the USENET mainstream. If it doesn't it is simply deleted with a few weeks notice. Readers of the group may elect to form a mailing list or find another method of distribution.

JUDGING THE SUITABILITY OF THE TOPIC

If you wish to create a group, you should ensure that you have a topic that is likely to experience varied discussion for a long and indefinite period of time. The purpose of the group should be clear -- not too general (like, "the IBM PC") and not too specific (like, "squid recipes"). The topic should not be short lived, unless all you want is a 5 month run in the trial hierarchy. A general topic should be broken down until you have something that is important and likely to generate a moderate volume of discussion.

There are exceptions to this which you can only learn fully through experience with USENET.

Next check to see if there isn't already a group on USENET that covers your topic. If you find a close match, read that group for a while to see if your topic gets discussed there. Bring it up yourself it you don't see it discussed for a while. (This is a strong requirement. You should not propose a new group if you have no familiarity with groups that might well already contain discussion of your topic.)

If it turns out your topic is an offshoot of an existing group, and it is in fact already heavily discussed in that group, you may wish to split that group. The trial group system has no mechanism for splitting regular USENET groups. You must arrange another means to do that.

If you have a truly new topic and:

- a) It is either different enough from all the other group topics that it needs its own newsgroup, or
- b) There is a group related to your topic, but the relationship is marginal, and the volume of discussion your topic would engender is too high for that group;

then you may indeed have a suitable topic for a new newsgroup.

Make sure as well that the topic is appropriate for world wide distribution. You're going to be sending this discussion over more than 15,000 machines. (In part, this is what the trial will decide if you aren't sure yourself.)

STARTING THE TRIAL

Write up a proposal, listing:

- o) The proposed topic for the newsgroup. If it's an obscure topic, provide a bit of information about the nature of it.
- o) What sort of discussion you expect to see there.
- o) What hierarchy on USENET you think it might belong in.
- o) A suggestion as to possible names.
- o) Reasons why this topic really doesn't belong in other groups.
- o) Whether or not you plan to moderate a group. (You can't suggest a moderated group unless you have a moderator ready.)

(See other postings to trial.newgroups for a model proposal.)

The name and USENET hierarchy won't be chosen by you, but you can make suggestions. A good suggestion that is consistent with other existing names is more likely to be chosen. Note that a good name must be meaningful to outsiders who are unfamiliar with the topic, so stay away from acronyms or terms known only to insiders. Unless you want to be ultra-specific about what takes place in the group, a well understood name is better than an extremely precise one.

E-mail the proposal to trialgroup@uunet.uu.net. This will send it to all of the volunteer trial group moderators, or "judges." In addition, the software will randomly pick one of these people to be the judge for your trial group. The judge will be a person with long experience with USENET, and he or she will offer you help if there is room for improvement in your proposal. Some further names may also be suggested. Joke proposals will not be accepted -- a trial newsgroup involves a fair bit of effort and expense by a lot of people, and no matter how funny a joke is, it won't be as long lived as the effort in running a trial group.

[Don't use the 'trialgroup' address other than to get a judge assigned to your group. That judge will reply to you -- correspond with him or her directly thereafter. If you really *have* to mail to all the trial judges, and not the one(s) involved in your group, you can mail to trial-judges@uunet.uu.net.]

Once a trial name has been decided upon and the proposal finalized, the trial group will be created by the trial hierarchy judges. You should then post the finalized proposal to news.announce.newgroups (or mail it to the moderator at announce-newgroups@ncar.ucar.edu) and trial.newgroups. (Due to the nature of moderated groups, you can't crosspost; you must post twice, once to each group.) If there is a group with a related topic, you should also post the announcement of the new group there.

Now start using your group. Write a more detailed description of the group, and post it there. Welcome new users and start discussion. While (unless you're moderator) you won't own or control the group after creating it, you might see fit to act as a sort of custodian for the group, helping new users, preparing lists of frequently asked questions or an introduction to the group that gets posted every month or two. If you stop reading your group sometime in the future, you should find another volunteer for that position.

Many sites in the trial hierarchy will send in readership reports. If your site does not do this, look for the "arbitron" program and instructions posted at the start of every month in news.admin, and get your site involved. The arbitron results will be posted on the 1st of every month.

For the first 1-2 months, the results for your group will be artificially low, since it takes time for results to come in from a wide enough range of sites. Don't be concerned about those early figures.

After the 5th readership report to include your group, the day of judgement is at hand. All USENET groups, and your group, will be ranked according to the number of readers per site which gets the group. (Your group will only go to the trial subnet, so both numbers will be reduced, keeping the ratio valid.) "USENET groups" means all the accepted groups in the 7 main hierarchies of USENET, less those that have been truly dormant for several months, in the judge's opinion.

If your group ranks among the top 3/4 of USENET groups in readers per site, it gets promoted to a USENET group. Right now (May/90) this means a readership value of about 1 reader for every 3 sites getting the group, but that may change as USENET grows. If your group can't find a reader on 2/3 of the sites it goes to, it's probably not an appropriate topic for full-net distribution.

Either way, pass or fail, mail a reminder of the results to your judge.

FAILURE:

An announcement will be made (by you, or failing that, a trial hierarchy judge) indicating that the group failed the test. This gives you time to wrap up affairs, or consider the creation of a mailing list devoted to the topic. After 2-3 weeks the group will be deleted (rmgrouped). Any attempts to post to it will result in mail to the poster and the USENET admin at the poster's site.

SUCCESS:

If the group passes the test, it gets renamed. That means that a USENET group with an appropriate name will be created. Many sites will alias the old name to the new name. You should tell all readers of the trial group about the new name, and get them to switch over. You may crosspost between

the two groups for the first week, but after that, you should actively discourage any crossposting between the groups. After a few more weeks, the trial group will be deleted, with a few days notice.

Post once again to news.announce.newgroups, indicating that the group passed and has now been created within USENET proper.

Do the same thing in the USENET group that you did in the trial group. Tell people about the group, and post any standard introductory postings that you may have written. Welcome the new readers. Then participate in the group.

FAST PROMOTION:

If a group ever ranks in the top 50% of USENET groups in readers/site, it can, at your discretion, move over to USENET immediately. Mail to your judge and request the immediate move. This can happen at any time, but the group must get this ranking in the top 50% with results from at least half the trial hierarchy. (ie. if you only get 6 sites reporting in the first month, and they all have 10 readers, it doesn't qualify.)

REFUSAL OF A TRIAL

In rather unusual cases, the judges can refuse a serious trial. For example, an illegal group might cause this to happen. If the judges can't convince the proponent of the group that it's not a good idea, they may decide to register opposition to the trial. At the start of the trial -- prior to the group's creation, a vote from 2/3 of the judges (5 of the 7) can refuse the trial. At the end of the trial, a vote from 3/4 of the judges (6 of the 7) can stop the group's promotion.

Is this a horrible autocratic power? Not at all. If a trial or promotion is refused by the above veto, the proponent of the group is still free to use the old discussion/survey method of group creation -- ie. things fall back to the method we had before the trial hierarchy was created. Refusing a trial is a very serious move that judges will do only very rarely -- not simply because they don't like a group, but rather because they feel it could cause serious damage to the net. To get 5 or 6 judges to agree to a refusal will mean there's a real problem, indeed.

NAMING

As described above, a trial name will be decided by the trial judges in conjunction with you, the group's "champion." They get the final say. If there is real feeling that the name is inappropriate, you can discuss this in your trial group. Proposals for a new name can then be put to the trial judges. This may result in a new name if the group is promoted to full distribution. The final decision, however, remains up to the trial

judges. If they really miss the boat on a couple of names, they won't be trusted as trial judges for much longer.

HIERARCHY

You can suggest a hierarchy to the trial judges, but the decision is up to them. Here are the existing hierarchies:

COMP

Computer related technical discussion. In general, groups in COMP are expected to have direct value to a site's commercial or academic goals.

SCI

Groups about scientific topics, again expected to have direct value to a site's commercial or academic goals.

RFC

Groups about recreation, hobbies, sports, entertainment, leisure, the arts, etc.

NEWS

Groups pertaining to USENET and USENET related networking.

SOC

Groups about social issues and social interaction. The humanities, etc. (excluding the recreational arts.)

TALK

Groups about topics that often engender heated or emotional debate. Politics, religion, abortion, philosophy, text editors, discrimination etc. Note that even if a topic seems a perfect fit for another hierarchy, if it's going to experience a lot of heated debate and "flaming," then it belongs here. "Social club" groups, which exist more to talk to friends than to address a specific topic, also belong here.

MTSC

The rest, including most business related topics.

ALT

You don't need a trial to start a group in ALT. Go ahead. But the more people "go ahead" without following the guidelines suggested above (or in the other group creation guidelines) the more sites that will ignore ALT groups.

BIZ

The "biz" hierarchy is not part of USENET. The trial.biz hierarchy, however, exists for the creation of commerce related groups. Some people love these groups (misc.jobs.offered is one of the most popular on USENET) and some people think they have no

place here. "trial.biz" is a place to try out such groups. We're not talking about groups with nothing but hype, but useful groups (like misc.jobs.offered and misc.forsale) that benefit both the posters and the readers. When moved into USENET they will be put into another hierarchy (usually MISC or COMP) depending on what's appropriate. If you want to use the top level BIZ hierarchy, there are no hard and fast rules. Post to biz.config.

GNU, VMSNET, UNIX-PC, BIONET, CLARI, etc.

These hierarchies are not part of mainstream USENET. They have their own rules for group creation which you must investigate.

NOTES:

Risky business:

As noted, any serious group proposal will be created as a trial. You may get some advice not to do so from the trial group judges, but if you insist, it will be done. Some sites, however, will refuse to carry quasi-illegal material, such as groups relating to sex, drugs, porn and other activities that are illegal or discouraged in some parts of the net. Their machines are theirs to command, so it is considered polite to warn everybody about a group with potential danger so that they can make their own decisions.

Appeals:

If your group fails, it is advised that you not suggest it again for at least a year, unless something really unusual comes up. It would take very rare circumstances for the trial judges to restart a trial in less than six months.

You can, after a trial fails, go through another group creation process, such as a discussion/survey. Nobody knows what will happen the first time somebody tries this. I predict that people won't take kindly to this, but who knows. (Some people may hate the trial system and support you only for that reason.)

Autonomous admins:

Even after your group has a good trial, news administrators on their own machines are not bound to create, carry or propagate your group. The fact that it does well makes it pretty likely, but not assured, particularly at the leafs. This is true in any group creation system.

Cheating:

Deliberate attempts to bias the arbitron statistics are likely to get discovered. If you're caught and exposed, it's likely to do you more harm than good. If there's proof, the judges will cancel your trial, and even if there isn't it is likely that you will anger site admins enough that they

ignore the group even if it appears to pass the test. A suspect passing result can be worse than a failed one -- so don't even risk it.

Running around making sure reader sites send in their honest readership reports will bias the results somewhat. This is accounted for, and in the long run, it's good, because those reports will keep coming, and they report on all trial groups, not just yours.

The Judges:

The rules above are deliberately vague to give the judges room to breathe, and to stop control freaks from pointing out nitpicking technical violations. A technical violation of this procedure is tough, because things are left open.

If you don't like the judges and how they rule, you can always use the discussion/survey group creation method.

The only rules the judges must follow are:

- o) The current success/fail criteria must be announced in advance.
- o) If there's a conflict of interest, a judge dealing with a particular group should pass the decision on to another judge.
- o) Decisions can be appealed to a tribunal, where each of the 3 judges will write a public decision, majority winning.
- o) All serious proposals that haven't been done recently should be accepted if the group's champion insists, but judges are free to put a dissenting comment on any such proposal.
- o) A tribunal is selected randomly from the pool of judges, excepting the judge being appealed. No appeal on a tribunal's decision.

Other "good ideas" are:

- o) Decisions about the final name should be done by a tribunal, where possible, based on input from the trial group and e-mailed comments from the net at large.
- o) No simultaneous creation by both methods. Users who do both may get their trial group summarily deleted for annoying the judges and giving them extra work to make the user's life easier.

Who are the judges?

There are 7. I, Brad Templeton, am the first "chief justice." The chief justice has no special powers, other than having written this document, but hey, the title sounds neat. The other 6 volunteers are all system admins, from a variety of areas on USENET, who have had several years experience with USENET and USENET groups.

All judges will pass on any decision to other volunteer judges if they have a conflict of interest. (ie. plan to read the group, or participate actively in a similar group.)

The judges really aren't all that powerful. The *real* decision as to whether a group gets created belongs with the readers. If they like the group, it stays, if they don't, it goes. The judges only get final say on the name, and they get to interpret the minor guidelines.

Their primary goal is to give advice, as experienced netters, on how to make a group creation go smoothly. They aren't there to hinder the process, or fight against it. They get the title "judge" because it sounds important, and it means that people will avoid arguing with them over silly nitpicky points.

A Guide to Social Newsgroups and Mailing Lists

Xref: blister news.announce.newusers:73 news.groups:7464

Path: blister!jtsv16!torsqnt!news-server.csri.toronto.edu!rpi!zaphod.mps.ohio-

state.edu!sdd.hp.com!news.cs.indiana.edu!purdue!intuitive.com!taylor

From: taylor@intuitive.com

Newsgroups: news.announce.newusers,news.groups

Subject: A Guide to Social Newsgroups and Mailing Lists

Message-ID: <15414@ector.cs.purdue.edu>

Date: 25 Jul 91 23:16:21 GMT
Expires: 23 Oct 91 23:16:20 GMT
Sender: spaf@cs.purdue.EDU
Reply-To: taylor@intuitive.com
Followup-To: news.announce.newusers

Lines: 241

Approved: spaf@cs.purdue.EDU

Supersedes: <14710@ector.cs.purdue.edu>

Original-from: taylor@intuitive.com (Dave Taylor)

[Most recent change: 9 Nov 1990 by taylor@intuitive.com (Dave Taylor)]

A Brief Guide to Social Newsgroups and Mailing Lists on the Usenet

INTRODUCTION

The Usenet distributed conferencing system is a terrific way to meet new friends and engage in many interesting topics of conversation, but people just joining our on-line community often have a difficult time figuring out which group is which and what groups they could join to find like-minded individuals.

To try to help this situation, this article is intended to be one of a group of regularly posted articles that are given to new users to aid you in deciding where you might have the best luck finding new electronic friends that share your interests both socially and sexually.

Disclaimer: some of what is said on Usenet might be offensive to you as some of the groups discuss topics that are, well, a bit unusual. Fortunately it's easy to avoid this problem; don't read that group. Also please keep in mind that the more controversial the subject, the more likely the group is awash in inane, unrelated discussion, partially due to the nature of the Usenet community and partially perhaps due to how uncomfortable most people are with these subjects.

To reiterate this point, please do NOT join a group to find a forum for

arguing or demonstrating righteous indignation over a particular belief, behavior, or desire. Those discussions are almost always completely inappropriate and the more controversial the subject, the more likely the participants in a group are going to dislike judgemental postings. Also, there is a good chance that you have misunderstood either the offending article or the responses of other readers. In other words, you may well be alone in your indignation.

Finally, as with all groups on the Usenet, once you find one that seems of interest, please try to spend a week or two just reading the group and learning how conversations proceed in that particular forum before you jump in. It'll save you, and others, a lot of grief and unpleasantness.

THE GROUPS

alt.romance

One of the nicest things about any relationship, be it the beginning of a courtship or years into a more serious committment, are the little things that you do for each other, the romance. If you're interested in chatting with people about what is considered romantic, talking about a particular romantic thing that you've done, or even just reading stories about what other couples have done to 'be romantic' or 'have a romantic liason', then this is the group.

alt.sex

What's a relationship without sex? For that matter, how many of us would be around without our parents having had sex? This group is one of the most controversial on the net, not surprisingly, and while the actual number of articles that discuss sex or sexuality is distressingly low, the group is still an interesting place to find the occasional horror story of a sexual rendezvous gone bad, to read debates about what type of birth control (or condom) is best, or even to read some surprisingly revealing details about the sex lives of people on the net.

alt.sex.bestiality

While bestiality refers to engaging in sexual activity with an animal, the articles in this group seem to talk about everything but that.

alt.sex.bondage

The best spin-off discussion from alt.sex, this group has a higher level of interesting articles, which talk about bondage and related topics, ranging from the psychology of being confined by another during sexual play to the mechanics of different bondage devices. It also occasionally delves into sadism and masochism, so as with any other group, if you don't like what you're reading, be prepared to unsubscribe.

rec.arts.erotica

A moderated group with long, but infrequent articles, rec.arts.erotica is the main focus for erotica and pornography, depending on your standards. Most are explicit, and some demonstrate a surprising writing ability, but many also seem rather sleazy and variously demeaning. Just like reading the Letters to Penthouse, it's a mixed bag as to whether any of it will be exciting or erotic to you.

soc.couples

Being in a short or long term relationship offers much in the way of joy, pleasure, and emotional satisfaction, but it also offers the chance for major arguments and other problems. This group is where you can talk about the relationship you're in with others that are also in relationships of their own.

soc.feminism

Soc.feminism is a moderated newsgroup for the discussion of feminist issues. Both men and women are encouraged to post to it and discussion is not limited to the pro-feminist viewpoint.

This group differs from soc.women in that moderation keeps out the flames and inappropriate cross-posts. In addition, there are several subjects appropriate for soc.women but not soc.feminism (e.g. the sporadic "where do I find comfortable shoes?" discussion that turns up in soc.women or discussions of women's health, other than policy issues related to it).

soc.men

This group discusses similar issues to soc.women, but from the male perspective. Topics include equal rights, child support, custody of children, relationships and so on. In addition, there are often topics specific to men including shaving in the shower, post-workout skin care, and similar. Both men and women are active participants in this group.

soc.motss

While the Usenet community is pretty open minded, many of the aforementioned social groups tend to be populated primarily by the heterosexual community. Soc.motss (Members of the Same Sex) is where people who are lesbian, gay, bisexual, or just interested and sympathetic can share conversation about relationships, dating, travel, and the like. Discussion of the validity or appropriateness of homosexuality is inappropriate, however, and will not be appreciated.

soc.singles

Of all the things that people seem to have in common, perhaps the most common thread of all is the bouts of being single, and the hunting and searching for relationships that this implies. This group is a forum for all discussions even vaguely related to either being single or the quest for a relationship. Indeed, it has been likened to an electronic cocktail party, where people have known each other (electronically, usually) for years. There are also a number of people in relationships that share their thoughts, as well as a high level of aggression between some of the contributors.

soc.women

Soc.women is an unmoderated group that discusses similar issues to soc.men, but from the female perspective. Topics include equal rights, child support, custody of children, relationships and so on. In addition, there are often topics specific to women including shaving legs, finding comfortable shoes, and so on. Both men and women are active participants in this group.

OTHER PLACES TO LOOK

In addition to these Usenet groups, there are many other forums on Usenet where you can make new friends and share conversations about topics of interest to yourself. Among them are the many "soc.culture" groups for specific ethnic/geographic cultures, the "soc.religion" and "talk.religion" groups for those interested in meeting friends of a specific religious background, the "rec.*" groups oriented about a specific recreational activity and many more.

Also, there are a number of different private mailing lists for specific sexual and social orientations, including:

alternates

Contact: alternates-request@binbi.vanc.wa.us

Purpose: Mail.alternates is a mail list for people who advocate, and/or practice an open sexual lifestyle. Its members are primarily bisexual men and women, and their SO's. Mail.alternates is intended as a forum, and support group for adult men and women who espouse their freedom of choice and imagination in human sexual relations, no matter what their orientaion. Those who are offended by frank, and uninhibited discussions relating to sexual issues should not subscribe.

Moderator/Editor: Hank Buurman <hanker@binbi.roy.or.us>

bears

Contact: bears-request@spdcc.COM (Steve Dyer & Brian Gollum) ...!{harvard,ima,linus,mirror}!spdcc!bears-request

Purpose: Mail.bears is a mailing list in digest format for gay

and bisexual men who are bears themselves and for those who enjoy the company of bears. The exact definition of a "bear" seems to be a personal one, but it encompasses men who are variously cuddly, furry, perhaps stocky, or bearded. Mail.bears is designed to be a forum to bring together folks with similar interests for conversation, friendship and sharing of experiences. The tone of mail.bears will be determined by its members, but people uncomfortable with discussing sexually explicit topics via electronic mail should not subscribe.

cdforum

Contact: uunet!samsung!wizvax!cdforum-request (Stephanie Gilgut)

Purpose: To provide support/discuss/share experiences about gender related issues; Crossdressing, Transvestism, Transsexualism, etc. This list is in Digest Format.

feminists

Contact: femail@hpldlh.hpl.hp.com (Patricia Collins)

Purpose: The feminist mailing list is intended to provide a forum for discussion of issues of interest to women, in a friendly atmosphere. The basic tenets of feminism and the day-to-day experiences of women do not have to be explained or defended. Men and women can join, but everyone requesting to be added to the mailing list MUST provide the moderator with: 1) a full name; 2) a complete uucp path to a well-known host or a fully specified Internet address; 3) the correspondent's gender (for records and statistics only). NO exceptions.

men

Contact: attunix!mail-men-request
 mail-men-request@attunix.att.com (Marcel Franck Simon)

Purpose: This digested mailing list discusses "men's issues." Both women and men may join. Mail-men is a place where men and women can discuss men's issues in an atmosphere of openness and support. Men's issues are those problems and experiences that affect male humans.

sappho

Purpose: A forum and support group for gay and bisexual women. The list is not moderated, but may become so if the volume and/or content begins to warrant it. A digest version is available; if you want it, be sure to mention it in your addition request. Men who want to "listen in," for whatever reason, are requested to use the feminist and alternates mailing lists instead; sappho membership is limited to women.

SUMMARY

Please use this list of Usenet groups and mailing lists as one of the many signposts to help you find the groups that you'll be interested in. One other terrific place to find more information is by asking your friends on the net what groups they read too!

What is Usenet?

Xref: blister news.announce.newusers:57 news.admin:4313

Path: blister!jtsv16!torsqnt!news-server.csri.toronto.edu!rpi!zaphod.mps.ohio-

state.edu!samsung!news.cs.indiana.edu!purdue!spaf

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.announce.newusers,news.admin

Subject: What is Usenet?

Message-ID: <15396@ector.cs.purdue.edu>

Date: 25 Jul 91 23:15:52 GMT Expires: 23 Oct 91 23:15:52 GMT Followup-To: news.announce.newusers

Organization: Dept. of Computer Sciences, Purdue Univ.

Lines: 265

Approved: spaf@cs.purdue.EDU

Supersedes: <14692@ector.cs.purdue.edu>

Original from: chip@count.tct.com (Chip Salzenberg)

[Most recent change: 23 Jul 1991 by spaf@cs.purdue.edu (Gene Spafford)]

The first thing to understand about Usenet is that it is widely misunderstood. Every day on Usenet, the "blind men and the elephant" phenomenon is evident, in spades. In the opinion of the author, more flame wars arise because of a lack of understanding of the nature of Usenet than from any other source. And consider that such flame wars arise, of necessity, among people who are on Usenet. Imagine, then, how poorly understood Usenet must be by those outside!

Any essay on the nature of Usenet cannot ignore the erroneous impressions held by many Usenet users. Therefore, this article will treat falsehoods first. Keep reading for truth. (Beauty, alas, is not relevant to Usenet.)

WHAT USENET IS NOT

1. Usenet is not an organization.

Usenet has no central authority. In fact, it has no central anything. There is a vague notion of "upstream" and "downstream" related to the direction of high-volume news flow. It follows that, to the extent that "upstream" sites decide what traffic they will carry for their "downstream" neighbors, that "upstream" sites have some influence on their neighbors. But such influence is usually easy to circumvent, and heavy-handed manipulation typically results in a backlash of resentment.

2. Usenet is not a democracy.

A democracy can be loosely defined as "government of the people, by the people, for the people." However, as explained above, Usenet is not an organization, and only an organization can be run as a democracy. Even a democracy must be organized, for if it lacks a means of enforcing the peoples' wishes, then it may as well not exist.

Some people wish that Usenet were a democracy. Many people pretend that it is. Both groups are sadly deluded.

3. Usenet is not fair.

After all, who shall decide what's fair? For that matter, if someone is behaving unfairly, who's going to stop him? Neither you nor I, that's certain.

4. Usenet is not a right.

Some people misunderstand their local right of "freedom of speech" to mean that they have a legal right to use others' computers to say what they wish in whatever way they wish, and the owners of said computers have no right to stop them.

Those people are wrong. Freedom of speech also means freedom not to speak; if I choose not to use my computer to aid your speech, that is my right. Freedom of the press belongs to those who own one.

5. Usenet is not a public utility.

Some Usenet sites are publicly funded or subsidized. Most of them, by plain count, are not. There is no government monopoly on Usenet, and little or no control.

6. Usenet is not a commercial network.

Many Usenet sites are academic or government organizations; in fact, Usenet originated in academia. Therefore, there is a Usenet custom of keeping commercial traffic to a minimum. If such commercial traffic is generally considered worth carrying, then it may be grudgingly tolerated. Even so, it is usually separated somehow from non-commercial traffic; see "comp.newprod."

7. Usenet is not the Internet.

The Internet is a wide-ranging network, parts of which are subsidized by various governments. The Internet carries many kinds of traffic; Usenet is only one of them. And the Internet is only one of the various networks carrying Usenet traffic.

8. Usenet is not a UUCP network.

UUCP is a protocol (some might say "protocol suite," but that's a technical point) for sending data over point-to-point connections, typically using dialup modems. Usenet is only one of the various kinds of traffic carried via UUCP, and UUCP is only one of the various transports carrying Usenet traffic.

9. Usenet is not a UNIX network, nor even an ASCII network. It is also most certainly not just an American network.

Don't assume that everyone is using "rn" on a UNIX machine. There are Vaxen running VMS, IBM mainframes, Amigas, and MS-DOS PCs reading and posting to Usenet. And, yes, some of them use (shudder) EBCDIC. Ignore them if you like, but they're out there. Some sites use special character sets for non-English postings, too, and even if they use the same character set, realize that your words might mean different things in other cultures.

10. Usenet is not software.

There are dozens of software packages used at various sites to transport and read Usenet articles. So no one program or package can be called "the Usenet software."

Software designed to support Usenet traffic can be (and is) used for other kinds of communication, usually without risk of mixing the two. Such private communication networks are typically kept distinct from Usenet by the invention of newsgroup names different from the universally-recognized ones.

Well, enough negativity.

WHAT USENET IS

Usenet is the set of machines that exchange articles tagged with one or more universally-recognized labels, called "newsgroups" (or "groups" for short).

(Note that the term "newsgroup" is correct, while "area," "base," "board," "board," "conference," "round table," "SIG," etc. are incorrect. If you want to be understood, be accurate.)

DIVERSITY

If the above definition of Usenet sounds vague, that's because it is.

It is almost impossible to generalize over all Usenet sites in any non-trivial way. Usenet encompasses government agencies, large universities, high schools, businesses of all sizes, home computers of all descriptions, etc, etc.

CONTROL

Every administrator controls his own site. No one has any real control over any site but his own.

The administrator gets his power from the owner of the system he administers. As long as the owner is happy with the job the administrator is doing, he can do whatever he pleases, up to and including cutting off Usenet entirely. Them's the breaks.

PROPAGATION

In the old days, when UUCP over long-distance dialup lines was the dominant means of article transmission, a few well-connected sites had real influence in determining which newsgroups would be carried where. Those sites called themselves "the backbone."

But things have changed. Nowadays, even the smallest Internet site has connectivity the likes of which the backbone admin of yesteryear could only dream. In addition, in the U.S., the advent of cheaper long-distance calls and high-speed modems has made long-distance Usenet feeds thinkable for smaller companies. There is only one pre-eminent UUCP transport site today in the U.S., namely UUNET. But UUNET isn't a player in the propagation wars, because it never refuses any traffic -- it gets paid by the minute, after all; and besides, to refuse based on content would jeopardize its legal status as an enhanced service provider.

All of the above applies to the U.S. In Europe, different cost structures favored the creation of strictly controlled hierarchical organizations with central registries. This is all very unlike the traditional mode of U.S. sites (pick a name, get the software, get a feed, you're on). Europe's "benign monopolies," long uncontested, now face competition from looser organizations patterned after the U.S. model.

NEWSGROUP CREATION

As discussed above, Usenet is not a democracy. Nevertheless, the current most popular way to create a new newsgroup involves a "vote" to determine popular support for (and opposition to) a proposed newsgroup. The document that describes this procedure is entitled "How To Create A New Newsgroup." Its common name, however, is "the guidelines."

If you follow the guidelines, it is probable that your group will be created and will be widely propagated.

HOWEVER: Because of the nature of Usenet, there is no way for any user to enforce the results of a newsgroup vote (or any other decision, for that matter). Therefore, for your new newsgroup to be propagated

widely, you must not only follow the letter of the guidelines; you must also follow its spirit. And you must not allow even a whiff of shady dealings or dirty tricks to mar the vote.

So, you may ask: How is a new user supposed to know anything about the "spirit" of the guidelines? Obviously, he can't. This fact leads inexorably to the following recommendation:

>> If you are a new user, don't try to create a new newsgroup. <<

If you have a good newsgroup idea, then read the "news.groups" newsgroup for a while (six months, at least) to find out how things work. If you're too impatient to wait six months, then you really need to learn; read "news.groups" for a year instead. If you just can't wait, find a Usenet old hand to run the vote for you.

Readers may think this advice unnecessarily strict. Ignore it at your peril. It is embarrassing to speak before learning. It is foolish to jump into a society you don't understand with your mouth open. And it is futile to try to force your will on people who can tune you out with the press of a key.

IF YOU ARE UNHAPPY...

Property rights being what they are, there is no higher authority on Usenet than the people who own the machines on which Usenet traffic is carried. If the owner of the machine you use says, "We will not carry alt.sex on this machine," and you are not happy with that order, you have no Usenet recourse. What can we outsiders do, after all?

That doesn't mean you are without options. Depending on the nature of your site, you may have some internal political recourse. Or you might find external pressure helpful. Or, with a minimal investment, you can get a feed of your own from somewhere else. Computers capable of taking Usenet feeds are down in the \$500 range now, and UNIX-capable boxes are going for under \$2000, and there are at least two UNIX lookalikes in the \$100 price range.

No matter what, though, appealing to "Usenet" won't help. Even if those who read such an appeal are sympathetic to your cause, they will almost certainly have even less influence at your site than you do.

By the same token, if you don't like what some user at another site is doing, only the administrator and/or owner of that site have any authority to do anything about it. Persuade them that the user in question is a problem for them, and they might do something (if they feel like it).

If the user in question is the administrator or owner of the site from which he or she posts, forget it; you can't win. Arrange for your newsreading software to ignore articles from him or her if you can,

and chalk one up to experience.

WORDS TO LIVE BY #1: USENET AS SOCIETY

Those who have never tried electronic communication may not be aware of what a "social skill" really is. One social skill that must be learned, is that other people have points of view that are not only different, but *threatening*, to your own. In turn, your opinions may be threatening to others. There is nothing wrong with this. Your beliefs need not be hidden behind a facade, as happens with face-to-face conversation. Not everybody in the world is a bosom buddy, but you can still have a meaningful conversation with them. The person who cannot do this lacks in social skills.

-- Nick Szabo

WORDS TO LIVE BY #2: USENET AS ANARCHY

Anarchy means having to put up with things that really piss you off.

-- Unknown

--

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center, Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398 Internet: spaf@cs.purdue.edu phone: (317) 494-7825

How to Construct the Mailpaths File

Path: micasa!moore!telly!comspec!tvcent!lethe!torsqnt!news-

server.csri.toronto.edu!rpi!zaphod.mps.ohio-

state.edu!samsung!news.cs.indiana.edu!purdue!spaf

From: spaf@cs.purdue.EDU (Gene Spafford)

Newsgroups: news.lists,news.admin

Subject: How to Construct the Mailpaths File

Message-ID: <15404@ector.cs.purdue.edu>

Date: 25 Jul 91 23:16:03 GMT Expires: 23 Oct 91 23:16:02 GMT

Followup-To: news.lists

Organization: Dept. of Computer Sciences, Purdue Univ.

Lines: 133

Approved: spaf@cs.purdue.EDU

Supersedes: <14700@ector.cs.purdue.edu>

Original-from: Gene Spafford (spaf@cs.purdue.edu)

[Most recent change: 23 Jul 1991 by spaf@cs.purdue.edu (Gene Spafford)]

News 2.11 has been designed to make it simpler to submit articles to moderated newsgroups and to reply via mail to posted articles. For these functions to work, the file "mailpaths" must exist in the news library and contain current information. This file describes the syntax of the contents of the file and how to construct it for your site.

Syntax

All lines in the file consist of a keyword followed by whitespace, followed by a printf-style format string which is used to encode a mail address. The format string should be constructed so that there is a single "%s" in the field, and other information necessary to construct a valid address to the appropriate site (see below).

The keyword field consists of either the word "internet", the word "backbone", or some newsgroup pattern. These are examined by the software to determine which format-string to use. Note that the first appropriate line matched is the one used -- thus, the "backbone" keyword line should be placed last in the line if regional or local moderated groups are supported.

Addresses that end up with both "!" and "@" symbols in the resulting address get converted so that only "!" symbols appear in the final address. An address of the form "foo!bar!baz@barf" will get converted to "foo!bar!barf!baz" and then mailed. This should work properly, for "dumb" mailers but you should test it to make sure; "smart" mailers should have the format fields encoded as a simple "%s". Note that *any* address with more than a single "@" in it is illegal.

Submissions to moderated groups

When you attempt to post to a moderated newsgroup (indicated by the letter "m" in the 4th field of the "active" file for that group), the action of "inews" is to mail the submission to the moderator. This is done by searching through "mailpaths" file for a keyword matching the newgroup being posted to, or, by default, the keyword "backbone". Matching occurs as in the "sys" file -- thus, "world" and "all" will also match everything, while "news" or "news.all" will only match articles posted in the "news" category. This feature can be used to support local moderated groups.

Once a line has been matched, the name of the moderated group is transformed into an address. This is done by first turning all the imbedded periods within the newsgroup name into hyphens (e.g., "news.lists" becomes "news-lists") because many mailers mishandle addresses with periods in the username (periods are supposed to be delimiters only in the host/domain part of RFC822 addresses, but some mailers "overreact"). Next, the transformed group name is encoded into an address using the format-string present on the line matched from "mailpaths" and the article is mailed. Thus, a posting to "news.lists" from a site with the line

backbone emory!gatech!%s in the mailpaths file would have the article mailed to "emory!gatech!news-lists". Likewise, a line like

backbone %s@gatech.edu

would result in the article being mailed to "news-lists@gatech.edu". To make the mechanism for moderated postings simpler, a subset of the best-connected sites (plus some others) have committed to keeping a complete up-to-date set of mail aliases for the moderated groups. Therefore, to build this line in your "mailpaths" file, you need only construct an address to get the mail to one of these sites. In turn, once the submission reaches that site, it will be forwarded on to the appropriate moderator's mailbox.

The sites currently maintaining these lists are given in the following list. Pick the one that is "closest" to your site and use it in your "backbone" format string:

(ames.arc.nasa.gov) ames (decuac.dec.com) decuac (decwrl.dec.com) decwrl linus (linus.b.mitre.org) kddlab (kddlab.kddlabs.co.jp) mcnc (mcnc.org) mit-eddie (eddie.mit.edu) ncar (ncar.ucar.edu) osu-cis (cis.ohio-state.edu) (rutgers.edu) rutgers (ucsd.edu) ucsd

tektronix (tektronix.tek.com)

ucbvax (ucbvax.berkeley.edu)
uflorida (uflorida.cis.ufl.edu)

uunet (uunet.uu.net)

uw-beaver (beaver.cs.washington.edu)

watmath (math.waterloo.edu)

Internet Mail

If you define the "INTERNET" flag when you build 2.11 news, the software will use the internet-style "From:" header when addressing replies mailed to postings. If your mailer does not have this capability, you can still (possibly) achieve the same thing by defining the "internet" line in your "mailpaths" file to forward such mail to a host that does have a mailer which understands internet-style addresses.

The format of this line is very similar to the "backbone" line. As an example, consider:

internet emory!gatech!mcnc!%s

Thus, if "INTERNET" was defined when this version of news was built, any reply to a news article would not travel along the "Path:", but would instead be sent to "mcnc" for interpretation and remailing. For example, to reply to this article, the mail would be sent to "emory!gatech!mcnc!spaf@cs.purdue.edu" -> "emory!gatech!mcnc!cs.purdue.edu!spaf"

Note: This is being provided as a service to sites which do not have routing mailers or which have difficulty replying to articles. It is *NOT* intended for everyone to pass mail to other sites to send. Excessive use of this feature may result in severe problems for the sites doing the relaying, so please simply define this field to be "%s" if your mailer understands domain-style (internet-style) addressing.

The following sites will accept internet-format mail for forwarding:

decuac

kddlab

mcnc

ucsd

uunet

uw-beaver

watmath

- -

Gene Spafford

NSF/Purdue/U of Florida Software Engineering Research Center, Dept. of Computer Sciences, Purdue University, W. Lafayette IN 47907-1398

Internet: spaf@cs.purdue.edu phone: (317) 494-7825

Brief Description on how to send Mail

Path: micasa!contact!geac!becker!cbmtor!cbmvax!rutgers!usc!zaphod.mps.ohiostate.edu!sdd.hp.com!elroy.jpl.nasa.gov!wciu!art From: art@wciu.EDU (Art Nicolaysen) Newsgroups: news.newusers.questions Subject: Re: Mail addresses Keywords: Where in the net am I? Message-ID: <1990Aug5.132358.13473@wciu.EDU> Date: 5 Aug 90 13:23:58 GMT References: <5040@uafhp.uark.edu> Distribution: usa Organization: William Carey International University Lines: 207 In article <5040@uafhp.uark.edu> bbs00068@uafcseg.uucp (Joel Kolstad) writes: >I've been using Usenet here for about 6 months, and one thing that >still really baffles me is... HOW DO I GET MAIL TO WORK? Mail works >fine if all I want to do is stay of the same system, but once I go >cross-country, it's a hit-and-miss game of "mail bounce." I'll try to impart a little bit of what I've picked up in the last two years as a Unix troll and news reader. Best sources for info are in the "frequent postings" that should be found in news.announce.newusers; I also recomend the following books: "Using UUCP and Usenet" ,Todino, O'Reilly & Associates (you may send mail to nuts@ora.com for detailed descriptions on this & other helpful books, etc, etc) "Life with Unix", Don Libes, Hayden publishers (publisher info not certain, but this book is an EXCELLENT source of info not easily found; has a nice "history of Usenet" section.) These are good for starters. Any technical bookstore should be able to order these for you, ordinary bookstores, too, if you ask nicely. Disclaimer: I may not get everything right is what I'm about to say; I don't want to lead you into gross errors, so take a look at the books, read the "frequent postings", and pester your local experts for advice and

explanations.

Full bang paths:

News and mail originally got sent between machines via ordinary modems and phone lines, and the set of programs that make up UUCP facilitated the transfers. Back then, you had to specify the path that you wanted to send files, i.e "mail cit-vax!elroy!ames!freddy" to send mail to user freddy on system ames. This method of addressing is commonly known as "bang-path" addressing ("!" is pronounced "bang").

Mailing via pathalias:

As the number of systems that ran used UUCP grew, the software incoporated a database of paths to different systems; this is still in use on a lot of systems, and goes by the name of pathalias. With an up-to-date pathalias database on my system, I no longer have to worry about giving a full bang-path address. Using the example above, I can send mail to freddy at ames by entering "mail ames!freddy", and the mail software will query the pathalias database for the routing info.

Domains and domain addressing:

The newest method for specifying addresses is known as "domain-based" addressing. This notation has been adopted from addressing conventions used on the ARPAnet. (ARPAnet is no longer around, having been replaced by a collection of interconnected networks known as the Internet. For our purposes, we can treat the Internet as one huge network.) When you see ARPAnet, JUST THINK INTERNET. Now back to discussion of domains.

>understanding is this -- my address is kolstad@cae.wisc.edu.

In a domain-based address, as you read from right to left, you go from bigger to smaller domains. Top-level domains (in U.S.A) include edu, org, com, mil, gov, and net. Country abbreviations are valid top-level domains (i.e. well.sf.ca.us, system well, in SanFrancisco, etc). To my knowledge, UUCP is a pseudo-domain used when a system doesn't have a valid registered domain.

For your address, wisc is a 2nd-level domain, cae is a system within that domain (3rd level domains are possible), and kolstad is a user (natch). The outside world only has to worry about getting mail to the system given in the 2nd level, which then routes it to the local system and user.

Mailing via domain names:

Again, using the original example, I now send mail to freddy as

follows: "mail freddy@ames.nasa.gov" (names given domain-fashion don't always exactly match with names given bang-path fashion).

>When I mail something off, say to bogus@uxa.cso.uiuc.edu, the letter >works its way up the three until it comes to a node it recognizes -->edu, in this case -- and then works its way back down through uiuc to >cso, uxa, and finally to Mr. Bogus, right?

Not quite. The topmost system in the sender's local domain does a query of a system that acts as its "nameserver", to find out how to access the local domain where the message is headed. The nameserver computers contain addressing information that allows two computers on the Internet to make a direct, highspeed connection(~1.54Mbits/sec, compared to 9.6Kbits/sec for the fastest modems). This may not be the EXACT way it's done, but you can see the contrast between this and the UUCP-only method, where the message is passsed on by a number of intermediate systems.

I have to point out that you don't have to have a physical connection to the Internet to utilize domain-based addressing. We are registered as wciu.edu, have other machines within our local domain, and have a listing in a nameserver with a MX (mail exchange) record that shows what Internet-connected system handles our mail. We connect to this system with UUCP and a modem, and have access to the world with a local phone call. (see map below)

csvax.caltech.edu was our prior connection to the Internet.

Mixing addressing modes:

Addresses with both domain names and bang paths in them can be confusing, both to humans and mail forwarding software. With real dumb forwarders, mixing modes will guarantee misdelivery and frustration. A lot of the time you will see a mixed address when

- a) the destination isn't a registered domain,
- b) the sender doesn't have a decent pathalias database,
- c) or a major gateway between networks must be traversed (e.g., from the Internet to Bitnet).

>OK, assuming I'm right so far, let me tack on some other questions:
>What in the world do all those !'s in an address mean? Such as
>ferbie!hobbes@gmuvax2.gmu.edu? Is the stuff following the ! yet
>address that relates to a tree, except that now we're talking machine
>names instead of addresses? In other words, would mailing the
>previous address get to the machine gmuvax2, which in turn is
>connected to a bunch of little machines, including hobbes? Am I
>totally confused or what?

Remember that bang-paths get more specific as you read left to right, and domain names have smaller scope as you read right to left. I would (and hope a decent mail forwarder would) read the address above as:

"Deliver to system gmuvax2 within domain gmu.edu, thence to system ferbie, thence to user hobbes."

How the address is translated depends on whether the domain part or the bang part is evaluated first. I don't think the other reading is very plausible, because you're trying to get to a domain via a system that doesn't have a domain name. If the intention is "deliver to ferbie, then gmuvax2.gmu.edu, then hobbes", the address should be given as "ferbie!gmuvax2!hobbes", without any any domain syntax.

Here's a real-life example of mixed-mode adressing. It hardly ever caused bounced delivery, but I wouldn't recommend you try it.

My address this year, since we got our domain registered, is: art@wciu.edu.

Last year, because wciu.edu wasn't available, I used wciu!art@csvax.caltech.edu.

Interpreted as:

"deliver mail to domain csvax.caltech.edu, thence to system wciu, thence to user art."

I believe one of the "frequent postings" articles has a detailed discussion on how and how not to go about forming addresses.

>Finally, can somebody distinguish between UUCP, Internet, Usenet, and >Arpanet for me!? UUCP to me is a Unix-to-Unix copy program, right? >So people with UUCP addresses are on machines that don't have direct >connectors to the Inter/Use/Arpa Net and just call up (presumably) >other machines every now and then to get mail for them, right?

You've got Questions 2 and 3 right. Just remember ARPAnet is dead and buried, except for the mention of it in people's .signature files. As for Question 1,

"Usenet is a worldwide network of UNIX computers that run netnews software."

Using UUCP and Usenet, p. 106

```
Usenet consists of both machines that communicate over the Internet, and
those that use strictly UUCP dial-up connections.
>I realize that this is a lot to answer, and I thank anybody who can
>take the time to do it. Better yet, can anybody recommend a good
>reference on this bewildering subject?
>Thanks in advance to those with the courage to answer! :-) --> MY <--
>address on this convoluted (?) network is kolstad@cae.wisc.edu.
>
                        ---Joel Kolstad
>
                                              kolstad@cae.wisc.edu
Art Nicolaysen William Carey Int'l University (Global Mapping) art@wciu.edu Pasadena CA 91104
art@wciu.edu
                       Pasadena CA 91104
*************************
From: steve@thelake.mn.org (Steve Yelvington)
Newsgroups: news.newusers.questions
Subject: Re: Re: uucp addresses
Message-ID: <A1411716351@thelake.mn.org>
Date: 31 Jul 90 15:33:10 GMT
References: <shj.649396495@dkuugin>
Organization: Otter Lake Leisure Society
Lines: 48
X-Member-Of: STdNET
X-Bad-Pun:
             There's no place like Nome for the Hollandaise.
[In article <shj.649396495@dkuugin>,
     shj@login.dkuug.dk (Stig Jacobsen) writes ... ]
> When an address ends in 'uucp' (xx@yy.zz.uucp) where does it go? To
> a global UUCP server, that does manual dialouts for all the mail or to
> local servers in each country or region or ? (Just curious..).
> --
> Stig Jacobsen
> shj@login.dkuug.dk
> fidonet 2:231/16.0
It depends on where you are and how your computer is set up. If you
have old/stupid software it may not go anywhere at all.
UUCP mail is designed to hop through multiple systems. UUCP uses
paths, not addresses, of the form
```

neighbor1!neighbor2!neighbor3!mailbox

If you have a "smart mailer" program, it will convert Internet-style addresses into this form. "bush@whitehouse.UUCP" would become "whitehouse!bush". If your system did not connect with whitehouse, it would have a delivery problem.

Fortunately, there are maps of connectivity. That is what the UUCP Project is all about. (See comp.mail.maps.) Sites publish their connections, and the published data can be fed to a program (pathalias) that will produce a paths table from the perspective of your site. A smart mailer then can employ the paths table to route the mail properly.

Not everybody has the resources to maintain a database of all the UUCP systems in the world. Enter the "smart host" concept. A mailer can be configured to "kick upstairs" any undeliverable mail to another system that presumably has more complete records.

In Europe, UUCP connectivity tends to be highly structured in regional hub-and-spoke arrangements. It also costs money.

In North America, UUCP is uncontrolled and free (cooperative). Connections spread like crabgrass, which can lead to some very convoluted delivery paths. For example, we have a mail hub here in Minnesota administered by the state Unix user group, but mail also may go directly to the destination system or hop through several other systems. Most areas have no hubs at all.

Steve Yelvington at the (rain-replenished) lake in Minnesota steve@thelake.mn.org

How to Register Your Site in Usenet Maps from rutgers.uucp

```
# The UUCP map is posted to the newsgroup comp.mail.maps.
# From rn, the map can be easily unpacked with a command such as:
  43-46w | (cd ~uucp/uumap ; sh)
# or you can use John Quarterman's script to automatically unpack the
# files. All files intended as pathalias input being with "d." and
# "u.", thus:
# pathalias Path.* uumap/[du].*
# is a useful command to run. (You supply Path.* with local additions.)
# The files are organized by country, using the ISO 3166 3 letter
# country code for each country. Each file has a name like
# u.iso.r1.r2.s, where "iso" is the country code, r1, r2, etc are
# regions and subregions (e.g. states in the USA, provinces in Canada,
# etc.) and s is a sequence number (usually 1, but sometimes 2, 3, and
# up may be provided to keep individual files down to a reasonable size,
# thus, u.usa.ca is separated into two regions: [135] for southern,
# [246] for northern.)
# The map contains two types of files: u.* and d.* files. The d.* files
# are for domains registered in the UUCP Zone. The u.* files are for
# UUCP hosts that do not have officially registered domains. Membership
# in the UUCP Zone allows organizations and individuals to register
# official, unique, domain names, recognized by all major academic
# computing networks worldwide. For more information about joining the
# UUCP Zone, send electronic mail to the UUCP Project at one of the
# addresses:
#
   domain-request@uunet.uu.net
# {vucomp,halla,pyramid,rutgers,uiucuxc,rosevax}!uunet!domain-request
# or, if you cannot send electronic mail, telephone
   +1 703 764 9789
# We strongly encourage you to send email if at all possible, since it
# cuts down on telephone tag and is much more efficient on our volunteer
# workforce.
# This map can be used to generate mail routes with the pathalias
# program. The map is also useful to determine the person to contact
# when a problem arises, and to find someone for a new site to connect
```

```
# Pathalias was first posted to Usenet in January 1986. It is posted
# whenever a new release becomes available as well. The sources are
# posted in the comp.sources.unix newsgroup. You may also ask the
# comp.sources.unix moderator, Rich Salz, to send sources to you via
# email. Mail requests to rsalz@uunet.uu.net.
# Please check the entry for your host (and any neighbors for whom you
# know the information and have the time) for correctness and
# completeness. Please send corrections and additional information to
# uucpmap@rutgers.UUCP or rutgers!uucpmap or uucpmap@rutgers.EDU.
# This map is maintained by a group of volunteers who make up the UUCP
# Mapping Project. These people devote many hours of their own time to
# helping out the UUCP community by keeping this map up to date. The
# volunteers include:
#
#
# Tohru Asami - konish@kddlab.kddlabs.co.jp
#
   Japan: all regions
#
#
# Jesse Asher - homecare!jessea
   USA: Alabama, North Carolina, South Carolina, Tennessee
#
#
# Stan Barber - texas-uucpmap@tmc.edu
   USA: Texas
#
#
# Piet Beertema - Europe (piet@cwi.nl)
   Europe: all countries (unless otherwise noted)
#
#
# Bill Blue - bblue@crash.cts.com
#
   USA: Arizona, California (Southern half)
#
#
# Kent Brodie - brodie@fps.mcw.edu
   USA: North Dakota, South Dakota, Wisconsin
#
# Malcolm Carlock - uucpmap@unrvax.unr.edu
#
   USA: Nevada
#
#
# Dan Chaney - chaney@ms.uky.edu
#
   USA: Kentucky
#
#
# Haesoon Cho - dnmc@sorak.kaist.ac.kr
```

```
Korea: all regions
#
#
#
# Robert Elz, Dave Davey - map-coord@munnari.UUCP
   Australia: all regions
#
#
# Paul Graham - pjg@acsu.buffalo.edu
   USA: Delaware, Maryland, New Jersey, New York, Virginia, Washington DC,
#
   West Virginia
#
#
# Hokey - hokey@plus5.com
   USA: Missouri
#
# Jeff Janock - nemap@harvard.edu
#
   USA: Connecticut, Maine, Massachusetts, New Hampshire, Pennsylvania,
#
         Rhode Island, Vermont
#
#
# Bob Leffler - uucpmap@vela.acs.oakland.edu
#
   USA: Michigan
#
# Mikel Manitius - map-request@aaa.com
#
   USA: Florida
#
#
# Doug McCallum - dougm@ico.isc.com
   USA: Arkansas, Colorado, Iowa, Kansas, Louisiana, Mississippi, Nebraska,
#
         New Mexico, Oklahoma, Utah
#
#
# Mark Moraes - path@cs.toronto.edu
   CANADA: All provinces
#
#
#
# Todd Ogasawara - todd@pinhead.pegasus.com
   USA: Hawaii
#
#
#
# Mel Pleasant - pleasant@rutgers.edu
   Singapore: all regions
#
   New Zealand: all regions
#
#
# Rob Robertson - nca-maps@violet.berkeley.edu
#
   USA: California (Northern half)
#
#
```

```
# Partono Rudiarto - didik@indovax.uucp
#
   Indonesia: all regions
#
#
# David Schmidt - davids@isc-br.isc-br.com
   USA: Alaska, Idaho, Oregon, Montana, Washington, Wyoming
#
#
# Larry Snyder - larry@nstar.rn.com
#
   USA: Illinois, Indiana
#
#
# Gil Tene - devil@diablery.10a.com
   Israel: all regions
#
#
# Tim Thompson - tgt@att.att.com
#
   USA: Ohio
#
#
#
   Jeff Wabik - jwabik@msc.umn.edu
#
   USA: Minnesota
#
#
# Peter Wan - uucpmap@msdc.com
#
   USA: Georgia
#
# Please note that the purpose of this map is to allow mail routers
# within UUCP to work properly. The eventual direction is to make the
# map smaller (through the use of domains), not larger. As such, sites
# with lots of local machines connected together are *strongly*
# encouraged to join the UUCP Zone. Through the use of a domain, you
# need only register your domain gateway system(s) with the UUCP Mapping
# Project. Properly configured, all of your internal nodes will hide
# behind the gateway(s). We would prefer not to have information
# listing the machines on your local area networks. Helping us to
# accomplish the goal of reducing the size of the map will take some
# work on your part but it is well worth the effort. Once done, you
# will never need to register any new nodes acquired by you.
# Instructions for contacting the UUCP Zone are given above.
# PLEASE NOTE - IF YOU HAVEN'T THE TIME OR MANPOWER TO ACQUIRE A DOMAIN
# AND CONVERT YOUR SYSTEMS OVER TO USING IT, you are *strongly*
# encouraged to publish all the names of those sites in your local area
# network which can and do generate email messages or netnews articles.
# Publishing the names of all systems not hiding behind a domain is the
# only way to ensure that some other site will not register with the
# same name that you have chosen and hence will ensure that mail routers
# will generate uucp mail paths to your systems properly.
```

```
# The remainder of this file describes the format of the UUCP map data.
# It was written July 9, 1985 by Erik E. Fair <ucbvax!fair>, and last
# updated July 12, 1985 by Mark Horton <stargate!mark>.
# The entire map is intended to be processed by pathalias, a program
# that generates UUCP routes from this data. All lines beginning in `#'
# are comment lines to pathalias, however the UUCP Project has defined a
# set of these comment lines to have specific format so that a complete
# database could be built.
#
# The generic form of these lines is
# #<field id letter><tab><field data>
# Each host has an entry in the following format. The entry should
# begin with the #N line, end with a blank line after the pathalias
# data, and not contain any other blank lines, since there are ed, sed,
# and awk scripts that use expressions like /^#N $1/,/^$/ for the
# purpose of separating the map out into files, each containing one site
# entry.
#
# #N
       UUCP name of site
# #S
       manufacturer machine model; operating system & version
# #0
       organization name
# #C
       contact person's name
# #E
       contact person's electronic mail address
# #T
       contact person's telephone number
# #P
       organization's address
# #L
       latitude / longitude
# #R
       remarks
# #U
       netnews neighbors
# #W
       who last edited the entry; date edited
##
# sitename .domain
# sitename remote1(FREQUENCY), remote2(FREQUENCY),
    remote3(FREQUENCY)
#
# Example of a completed entry:
#
# #N
       ucbvax
# #S
       DEC VAX-11/750; 4.3 BSD UNIX
# #0
       University of California at Berkeley
# #C
       Robert W. Henry
# #E
       ucbvax!postmaster
# #T
       +1 415 642 1024
       573 Evans Hall, Berkeley, CA 94720
# #P
# #L
       37 52 29 N / 122 13 44 W
# #R
       This is also UCB-VAX.BERKELEY.EDU [10.2.0.78] on the internet
# #U
       decvax ibmpa ucsfcgl ucbtopaz ucbcad
# #W
       ucbvax!fair (Erik E. Fair); Sat Jun 22 03:35:16 PDT 1985
```

```
# #
# ucbvax
           berkeley.edu
# ucbvax
           = ucbvax.berkeley.edu
# ucbvax
            decvax(DAILY/4)
   sun(POLLED)
#
# Specific Field Descriptions
# #N
        system name
#
# Your system's UUCP name should go here. Either the uname(1) command
# from System III or System V UNIX; or the uuname(1) command from
# Version 7 UNIX will tell you what UUCP is using for the local UUCP
# name.
#
# One of the goals of the UUCP Project is to keep duplicate UUCP host
# names from appearing because there exist mailers in the world which
# assume that the UUCP name space contains no duplicates (and attempts
# UUCP path optimization on that basis), and it's just plain confusing
# to have two different sites with the same name.
# At present, the most severe restriction on UUCP names is that the name
# must be unique somewhere in the first six characters, because of a
# poor software design decision made by AT&T for the System V release of
# UNIX.
#
# This does not mean that your site name has to be six characters or
# less in length. Just unique within that length.
# With regard to choosing system names, HARRIS'S LAMENT:
#
    "All the good ones are taken."
#
#
# #S
       machine type; operating system
#
# This is a quick description of your equipment. Machine type should be
# manufacturer and model, and after a semi-colon(;), the operating
# system name and version number (if you have it). Some examples:
#
#
   DEC PDP-11/70; 2.9 BSD UNIX
#
   DEC PDP-11/45; ULTRIX-11
#
   DEC VAX-11/780; VMS 4.0
#
   SUN 2/150; 4.2 BSD UNIX
#
   Pyramid 90x; OSx 2.1
#
   CoData 3300; Version 7 UniPlus+
#
   Callan Unistar 200; System V UniPlus+
#
   IBM PC/XT; Coherent
#
   Intel 386; XENIX 3.0
#
   CRDS Universe 68; UNOS
#
# #0
        organization name
```

```
# This should be the full name of your organization, squeezed to fit
# inside 80 columns as necessary. Don't be afraid to abbreviate where
# the abbreviation would be clear to the entire world (say a famous
# institution like MIT or CERN), but beware of duplication (In USC the C
# could be either California or Carolina).
#
# #C
        contact person
# This should be the full name (or names, separated by commas) of the
# person responsible for handling queries from the outside world about
# your machine.
#
# #E
        contact person's electronic address
#
# This should be just a machine name, and a user name, like
# `ucbvax!fair'. It should not be a full path, since we will be able to
# generate a path to the given address from the data you're giving us.
# There is no problem with the machine name not being the same as the #N
# field (i.e. the contact 'lives' on another machine at your site).
# Also, it's a good idea to give a generic address or alias (if your
# mail system is capable of providing aliases) like 'usenet' or
# 'postmaster', so that if the contact person leaves the institution or
# is re-assigned to other duties, he doesn't keep getting mail about the
# system. In a perfect world, people would send notice to the UUCP
# Project, but in practice, they don't, so the data does get out of
# date. If you give a generic address you can easily change it to point
# at the appropriate person.
# Multiple electronic addresses should be separated by commas, and all
# of them should be specified in the manner described above.
#
# #T
        contact person's telephone number
#
# Format: +<country code><space><area code><space><prefix><space><number>
# Example:
#
# #T
       +1 415 642 1024
# This is the international format for the representation of phone
# numbers. The country code for the United States of America (and
# Canada) is 1. Other country codes should be listed in your telephone
# book.
# If you must list an extension (i.e. what to ask the receptionist for,
# if not the name of the contact person), list it after the main phone
# number with an `x' in front of it to distinguish it from the rest of
# the phone number.
#
```

```
# Example:
#
       +1 415 549 3854 x37
# #T
# Multiple phone numbers should be separated by commas, and all of them
# should be completely specified as described above to prevent
# confusion.
#
# #P
         organization's address
#
# This field should be one line filled with whatever else anyone would
# need after the contact person's name, and your organization's name
# (given in other fields above), to mail you something by paper mail.
#
# #L
         latitude and longitude
#
# This should be in the following format:
#
       DD MM [SS] "N"|"S" / DDD MM [SS] "E"|"W" ["city"]
# #L
#
# Two fields, with optional third.
# First number is Latitude in degrees (NN), minutes (MM), and seconds
# (SS), and a N or S to indicate North or South of the Equator.
# A Slash Separator.
# Second number is Longitude in degrees (DDD), minutes (MM), and seconds
# (SS), and a E or W to indicate East or West of the Prime Meridian in
# Greenwich, England.
# Seconds are optional, but it is worth noting that the more accurate
# you are, the more accurate maps we can make of the network (including
# blow-ups of various high density areas, like New Jersey, or the San
# Francisco Bay Area).
# If you give the coordinates for your city (i.e. without fudging for
# where you are relative to that), add the word 'city' at the end of the
# end of the specification, to indicate that. If you know where you are
# relative to a given coordinate for which you have longitude and
# latitude data, then the following fudge factors can be useful:
#
                                111 kilometers
# 1 degree =
               69.2 miles =
                                1.86 kilometers
# 1 minute = 1.15 miles =
# 1 second =
                102 feet
                                30.9 meters
# For LONGITUDE, multiply the above numbers by the cosine of your
# latitude. For instance, at latitude 35 degrees, a degree of longitude
# is 69.2*0.819 = 56.7 miles; at latitude 40 degrees, it is 69.2*0.766 =
# 53.0 miles. If you don't see why the measure of longitude depends on
# your latitude, just think of a globe, with all those N-S meridians of
```

```
# longitude converging on the poles. You don't do this cosine
# multiplication for LATITUDE.
# Here is a short cosine table in case you don't have a trig calculator
# handy. (But you can always write a short program in C. The cosine
# function in bc(1) doesn't seem to work as documented.)
# deg cos deg cos deg cos deg cos deg cos
  0 1.000 5 0.996 10 0.985 15 0.966 20 0.940 25 0.906
# 30 0.866 35 0.819 40 0.766 45 0.707 50 0.643 55 0.574
# 60 0.500 65 0.423 70 0.342 75 0.259 80 0.174 85 0.087
#
# The Prime Meridian is through Greenwich, England, and longitudes run
# from 180 degrees West of Greenwich to 180 East. Latitudes run from
# 90 degrees North of the Equator to 90 degrees South.
#
# #R
         remarks
#
# This is for one line of comment. As noted before, all lines beginning
# with a `#' character are comment lines, so if you need more than one
# line to tell us something about your site, do so between the end of the
# map data (the #?\t fields) and the pathalias data.
#
# #U
       netnews neighbors
# The USENET is the network that moves netnews around, specifically,
# news.announce.important. If you send news.announce.important to any of
# your UUCP neighbors, list their names here, delimited by spaces.
# Example:
#
# #U
       decvax mcvax seismo
# Since some places have lots of USENET neighbors, continuation lines
# should be just another #U and more site names.
#
# #W
         who last edited the entry and when
# This field should contain an email address, a name in parentheses,
# followed by a semi-colon, and the output of the date program.
# Example:
#
# #W
       ucbvax!fair (Erik E. Fair); Sat Jun 22 03:35:16 PDT 1985
# The same rules for email address that apply in the contact's email
# address apply here also. (i.e. only one system name, and user name).
# It is intended that this field be used for automatic aging of the
# map entries so that we can do more automated checking and updating
# of the entire map. See getdate(3) from the netnews source for other
# acceptable date formats.
# PATHALIAS DATA (or, documenting your UUCP connections & frequency of use)
#
```

```
# The DEMAND, DAILY, etc., entries represent imaginary connect costs (see
# below) used by pathalias to calculate lowest cost paths. The cost
# breakdown is:
#
#
   LOCAL
                25 local area network
#
   DEDICATED
                95 high speed dedicated
#
   DIRECT
                200 local call
#
   DEMAND
                    300
                            normal call (long distance, anytime)
#
                500 hourly poll
   HOURLY
#
   EVENING
                1800
                        time restricted call
#
   DAILY
                        daily poll
                5000
#
   WEEKLY
                        irregular poll
                30000
#
   DEAD
                    a very high number - not usable path
#
# Additionally, HIGH and LOW (used like DAILY+HIGH) are -5 and +5
# respectively, for baud-rate or quality bonuses/penalties. Arithmetic
# expressions can be used, however, you should be aware that the results
# are often counter-intuitive (e.g. (DAILY*4) means every 4 days, not 4
# times a day). This is because the numbers represent "cost of connection"
# rather than "frequency of connection."
# The numbers are intended to represent cost of transferring mail over
# the link, measured very roughly in elapsed time, which seems to be
# far more important than baud rates for this type of
# traffic. There is an assumed high overhead for each hop; thus,
# HOURLY is far more than DAILY/24.
# There are a few other cost names that sometimes appear in the map.
# Some are synonyms for the preferred names above (e.g. POLLED is assumed
# to mean overnight and is taken to be the same as DAILY), some are
# obsolete (e.g. the letters A through F, which are letter grades for
# connections.) It is not acceptable to make up new names or spellings
# (pathalias gets very upset when people do that...).
#
# LOCAL AREA NETWORKS
# We do not want local area network information in the published map.
# If you want to put your LAN in your local Path.* files, read about
# the LAN syntax in the pathalias.1 manual page.
# WHAT TO DO WITH THIS STUFF
# Once you have finished constructing your pathalias entry, mail it off
# to {uunet|qatech|ucsd|ames}!rutgers!uucpmap, which will be sent to the
# appropriate regional map coordinator. They maintain assigned
# geographic sections of the map, and the entire map is posted on a
# rolling basis in the USENET newsgroups comp.mail.maps over the course
# of a month.
# Questions or comments about this specification should also be directed
# at rutgers!uucpmap.
```

Standard for ARPA Internet Text Messages

PREFACE

By 1977, the Arpanet employed several informal standards for the text messages (mail) sent among its host computers. It was felt necessary to codify these practices and provide for those features that seemed imminent. The result of that effort was Request for Comments (RFC) #733, "Standard for the Format of ARPA Network Text Message", by Crocker, Vittal, Pogran, and Henderson. The specification attempted to avoid major changes in existing software, while permitting several new features.

This document revises the specifications in RFC #733, in order to serve the needs of the larger and more complex ARPA Internet. Some of RFC #733's features failed to gain adequate acceptance. In order to simplify the standard and the software that follows it, these features have been removed. A different addressing scheme is used, to handle the case of inter-network mail; and the concept of re-transmission has been introduced.

This specification is intended for use in the ARPA Internet. However, an attempt has been made to free it of any dependence on that environment, so that it can be applied to other network text message systems.

The specification of RFC #733 took place over the course of one year, using the ARPANET mail environment, itself, to provide an on-going forum for discussing the capabilities to be included. More than twenty individuals, from across the country, participated in the original discussion. The development of this revised specification has, similarly, utilized network mail-based group discussion. Both specification efforts greatly benefited from the comments and ideas of the participants.

The syntax of the standard, in RFC #733, was originally specified in the Backus-Naur Form (BNF) meta-language. Ken L. Harrenstien, of SRI International, was responsible for re-coding the BNF into an augmented BNF that makes the representation smaller and easier to understand.

9

9

January 13, 1983

- ii -

RFC #822

Standard for ARPA Internet Text Messages

1. INTRODUCTION

1.1. Scope

This standard specifies a syntax for text messages that are sent among computer users, within the framework of "electronic mail". The standard supersedes the one specified in ARPANET Request for Comments #733, "Standard for the Format of ARPA Network Text Messages".

In this context, messages are viewed as having an envelope and contents. The envelope contains whatever information is needed to accomplish transmission and delivery. The contents compose the object to be delivered to the recipient. This standard applies only to the format and some of the semantics of message contents. It contains no specification of the information in the envelope.

However, some message systems may use information from the contents to create the envelope. It is intended that this standard facilitate the acquisition of such information by programs.

Some message systems may store messages in formats that differ from the one specified in this standard. This specification is intended strictly as a definition of what message content format is to be passed between hosts.

Note: This standard is not intended to dictate the internal formats used by sites, the specific message system features that they are expected to support, or any of the characteristics of user interface programs that create or read messages.

A distinction should be made between what the specification requires and what it allows. Messages can be made complex and rich with formally-structured components of information or can be kept small and simple, with a minimum of such information. Also, the standard simplifies the interpretation of differing visual formats in messages; only the visual aspect of a message is affected and not the interpretation of information within it. Implementors may choose to retain such visual distinctions.

The formal definition is divided into four levels. The bottom level describes the meta-notation used in this document. The second level describes basic lexical analyzers that feed tokens to higher-level parsers. Next is an overall specification for messages; it permits distinguishing individual fields. Finally, there is definition of the contents of several structured fields.

9

9 January 13, 1983

- 1 -

RFC #822

Standard for ARPA Internet Text Messages

1.2. Communication Framework

Messages consist of lines of text. No special provisions are made for encoding drawings, facsimile, speech, or structured text. No significant consideration has been given to questions of data compression or to transmission and storage efficiency, and the standard tends to be free with the number of bits consumed. For example, field names are specified as free text, rather than special terse codes.

A general "memo" framework is used. That is, a message consists of some information in a rigid format, followed by the main part of the message, with a format that is not specified in this document. The syntax of several fields of the rigidly-formated ("headers") section is defined in this specification; some of these fields must be included in all messages.

The syntax that distinguishes between header fields is specified separately from the internal syntax for particular fields. This separation is intended to allow simple parsers to operate on the general structure of messages, without concern for the detailed structure of individual header fields. Appendix B is provided to facilitate construction of these parsers.

In addition to the fields specified in this document, it is expected that other fields will gain common use. As necessary, the specifications for these "extension-fields" will be published through the same mechanism used to publish this document. Users may also wish to extend the set of fields that they use privately. Such "user-defined fields" are permitted.

The framework severely constrains document tone and appearance and is primarily useful for most intra-organization communications and well-structured inter-organization communication. It also can be used for some types of inter-process communication, such as simple file transfer and remote job entry. A more robust framework might allow for multi-font, multi-color, multidimension encoding of information. A less robust one, as is present in most single-machine message systems, would more severely constrain the ability to add fields and the decision to include specific fields. In contrast with paper-based communication, it is interesting to note that the receiver of a message can exercise an extraordinary amount of control over the message's appearance. The amount of actual control available to message receivers is contingent upon the capabilities of their individual message systems.

9

9 January 13, 1983 - 2 -

RFC #822

Standard for ARPA Internet Text Messages

2. NOTATIONAL CONVENTIONS

This specification uses an augmented Backus-Naur Form (BNF) notation. The differences from standard BNF involve naming rules and indicating repetition and "local" alternatives.

2.1. Rule naming

Angle brackets ("<", ">") are not used, in general. The name of a rule is simply the name itself, rather than "<name>". Quotation-marks enclose literal text (which may be upper and/or lower case). Certain basic rules are in uppercase, such as SPACE, TAB, CRLF, DIGIT, ALPHA, etc. Angle brackets are used in rule definitions, and in the rest of this document, whenever their presence will facilitate discerning the use of rule names.

2.2. Rule1 / Rule2: Alternatives

Elements separated by slash ("/") are alternatives. Therefore "foo / bar" will accept foo or bar.

2.3. (Rule1 Rule2): Local alternatives

Elements enclosed in parentheses are treated as a single element. Thus, "(elem (foo / bar) elem)" allows the token sequences "elem foo elem" and "elem bar elem".

2.4. *Rule: Repetition

The character "*" preceding an element indicates repetition. The full form is:

<l>*<m>element

indicating at least <l> and at most <m> occurrences of element. Default values are 0 and infinity so that "*(element)" allows any number, including zero; "1*element" requires at least one; and "1*2element" allows one or two.

2.5. [Rule]: Optional

Square brackets enclose optional elements; "[foo bar]" is equivalent to "*1(foo bar)".

2.6. nRule: Specific repetition

"<n>(element)" is equivalent to "<n>*<n>(element)"; that is,
exactly <n> occurrences of (element). Thus 2DIGIT is a 2-digit
number, and 3ALPHA is a string of three alphabetic characters.

January 13, 1983

- 3 -

RFC #822

2.7. #Rule: Lists

A construct "#" is defined, similar to "*", as follows:

<1>#<m>element

indicating at least <l> and at most <m> elements, each separated by one or more commas (","). This makes the usual form of lists very easy; a rule such as '(element *("," element))' can be shown as "1#element". Wherever this construct is used, null elements are allowed, but do not contribute to the count of elements present. That is, "(element),,(element)" is permitted, but counts as only two elements. Therefore, where at least one element is required, at least one non-null element must be present. Default values are 0 and infinity so that "#(element)" allows any number, including zero; "1#element" requires at least one; and "1#2element" allows one or two.

2.8.; Comments

A semi-colon, set off some distance to the right of rule text, starts a comment that continues to the end of line. This is a simple way of including useful notes in parallel with the specifications.

265

9

9 January 13, 1983

- 4 -

RFC #822

Standard for ARPA Internet Text Messages

3. LEXICAL ANALYSIS OF MESSAGES

3.1. General Description

A message consists of header fields and, optionally, a body. The body is simply a sequence of lines containing ASCII characters. It is separated from the headers by a null line (i.e., a line with nothing preceding the CRLF).

3.1.1. Long Header Fields

Each header field can be viewed as a single, logical line of ASCII characters, comprising a field-name and a field-body. For convenience, the field-body portion of this conceptual entity can be split into a multiple-line representation; this is called "folding". The general rule is that wherever there may be linear-white-space (not simply LWSP-chars), a CRLF immediately followed by at least one LWSP-char may instead be inserted. Thus, the single line

To: "Joe & J. Harvey" <ddd @Org>, JJV @ BBN

can be represented as:

and

To: "Joe & J. Harvey"

<ddd@ Org>, JJV

@BBN

and

To: "Joe &

J. Harvey" <ddd @ Org>, JJV @ BBN

The process of moving from this folded multiple-line representation of a header field to its single line representation is called "unfolding". Unfolding is accomplished by regarding CRLF immediately followed by a LWSP-char as equivalent to the LWSP-char.

Note: While the standard permits folding wherever linearwhite-space is permitted, it is recommended that structured fields, such as those containing addresses, limit folding to higher-level syntactic breaks. For address fields, it is recommended that such folding occur

January 13, 1983

- 5 -

RFC #822

Standard for ARPA Internet Text Messages

between addresses, after the separating comma.

3.1.2. Structure of Header Fields

Once a field has been unfolded, it may be viewed as being composed of a field-name followed by a colon (":"), followed by a field-body, and terminated by a carriage-return/line-feed. The field-name must be composed of printable ASCII characters (i.e., characters that have values between 33. and 126.,

decimal, except colon). The field-body may be composed of any ASCII characters, except CR or LF. (While CR and/or LF may be present in the actual text, they are removed by the action of unfolding the field.)

Certain field-bodies of headers may be interpreted according to an internal syntax that some systems may wish to parse. These fields are called "structured fields". Examples include fields containing dates and addresses. Other fields, such as "Subject" and "Comments", are regarded simply as strings of text.

Note: Any field which has a field-body that is defined as other than simply <text> is to be treated as a structured field.

Field-names, unstructured field bodies and structured field bodies each are scanned by their own, independent "lexical" analyzers.

3.1.3. Unstructured Field Bodies

For some fields, such as "Subject" and "Comments", no structuring is assumed, and they are treated simply as <text>s, as in the message body. Rules of folding apply to these fields, so that such field bodies which occupy several lines must therefore have the second and successive lines indented by at least one LWSP-char.

3.1.4. Structured Field Bodies

To aid in the creation and reading of structured fields, the free insertion of linear-white-space (which permits folding by inclusion of CRLFs) is allowed between lexical tokens. Rather than obscuring the syntax specifications for these structured fields with explicit syntax for this linear-white-space, the existence of another "lexical" analyzer is assumed. This analyzer does not apply for unstructured field bodies that are simply strings of text, as described above. The analyzer provides an interpretation of the unfolded text

January 13, 1983

- 6 -

RFC #822

composing the body of the field as a sequence of lexical symbols.

These symbols are:

- individual special characters
- quoted-strings
- domain-literals
- comments
- atoms

The first four of these symbols are self-delimiting. Atoms are not; they are delimited by the self-delimiting symbols and by linear-white-space. For the purposes of regenerating sequences of atoms and quoted-strings, exactly one SPACE is assumed to exist, and should be used, between them. (Also, in the "Clarifications" section on "White Space", below, note the rules about treatment of multiple contiguous LWSP-chars.)

So, for example, the folded body of an address field

":sysmail"@ Some-Group. Some-Org,
Muhammed.(I am the greatest) Ali @(the)Vegas.WBA

9

9 January 13, 1983

- 7 -

RFC #822

Standard for ARPA Internet Text Messages

is analyzed into the following lexical symbols and types:

:sysmail quoted string special Some-Group atom special Some-Org atom special Muhammed atom special (I am the greatest) comment Ali atom atom (the) comment Vegas atom special WBA atom

The canonical representations for the data in these addresses are the following strings:

":sysmail"@Some-Group.Some-Org

and

Muhammed.Ali@Vegas.WBA

Note: For purposes of display, and when passing such structured information to other systems, such as mail protocol services, there must be no linear-white-space between <word>s that are separated by period (".") or at-sign ("@") and exactly one SPACE between all other <word>s. Also, headers should be in a folded form.

9

9 January 13, 1983

- 8 -

RFC #822

Standard for ARPA Internet Text Messages

3.2. Header Field Definitions

These rules show a field meta-syntax, without regard for the particular type or internal syntax. Their purpose is to permit detection of fields; also, they present to higher-level parsers an image of each field as fitting on one line.

field = field-name ":" [field-body] CRLF

field-name = 1*<any CHAR, excluding CTLs, SPACE, and ":">

field-body = field-body-contents

[CRLF LWSP-char field-body]

field-body-contents =

<the ASCII characters making up the field-body, as defined in the following sections, and consisting



```
analyzer, which feeds tokens to higher level parsers. See the
    ANSI references, in the Bibliography.
                                               ; ( Octal, Decimal.)
                                               ; ( 0-177, 0.-127.)
                = <any ASCII character>
    CHAR
                = <any ASCII alphabetic character>
    ALPHA
                                                ; (101-132, 65.- 90.)
                                               ; (141-172, 97.-122.)
                                             ; ( 60- 71, 48.- 57.)
                = <any ASCII decimal digit>
    DIGIT
                                               ; ( 0- 37, 0.- 31.)
                = <any ASCII control</pre>
    CTL
                   character and DEL>
                                               ; ( 177,
                                                             127.)
                = <ASCII CR, carriage return> ; ( 15,
= <ASCII LF. linefeed> ; ( 12,
    CR
                                                               13.)
                                              ; (
     LF
                                                               10.)
                = <ASCII SP, space>
    SPACE
                                               ; (
                                                      40,
                                                              32.)
                = <ASCII SP, space> ; ( 40, 
= <ASCII HT, horizontal-tab> ; ( 11, 
= <ASCII quote mark> ; ( 42,
    HTAB
                                                                9.)
    <">
                                                                34.)
    CRLF
                = CR LF
    LWSP-char = SPACE / HTAB
                                               ; semantics = SPACE
    linear-white-space = 1*([CRLF] LWSP-char) ; semantics = SPACE
                                                ; CRLF => folding
                = "(" / ")" / "<" / ">" / "@" ; Must be in quoted-
    specials
                / "," / ";" / ":" / "\" / <"> ; string, to use
                / "." / "[" / "]"
                                              ; within a word.
    delimiters = specials / linear-white-space / comment
     text
                = <any CHAR, including bare ; => atoms, specials,
                    CR & bare LF, but NOT
                                               ; comments and
                    including CRLF>
                                               ; quoted-strings are
                                               ; NOT recognized.
     atom = 1*<any CHAR except specials, SPACE and CTLs>
    quoted-string = <"> *(qtext/quoted-pair) <">; Regular qtext or
                                               ; quoted chars.
                = <any CHAR excepting <">, ; => may be folded
    qtext
                    "\" & CR, and including
                    linear-white-space>
    domain-literal = "[" *(dtext / quoted-pair) "]"
9
9
     January 13, 1983
                      - 10 -
                                                             RFC #822
```

comment = "(" *(ctext / quoted-pair / comment) ")"

quoted-pair = "\" CHAR ; may quote any char

phrase = 1*word ; Sequence of words

word = atom / quoted-string

3.4. Clarifications

3.4.1. Quoting

Some characters are reserved for special interpretation, such as delimiting lexical tokens. To permit use of these characters as uninterpreted data, a quoting mechanism is provided. To quote a character, precede it with a backslash ("\").

This mechanism is not fully general. Characters may be quoted only within a subset of the lexical constructs. In particular, quoting is limited to use within:

- quoted-string
- domain-literal
- comment

Within these constructs, quoting is required for CR and "\" and for the character(s) that delimit the token (e.g., "(" and ")" for a comment). However, quoting is permitted for any character.

Note: In particular, quoting is not permitted within atoms.

For example when the local-part of an addr-spec must contain a special character, a quoted string must be used. Therefore, a specification such as:

Full\ Name@Domain

9

9 January 13, 1983

- 11 -

RFC #822

Standard for ARPA Internet Text Messages

is not legal and must be specified as:

"Full Name"@Domain

3.4.2. White Space

Note: In structured field bodies, multiple linear space ASCII characters (namely HTABs and SPACEs) are treated as single spaces and may freely surround any symbol. In all header fields, the only place in which at least one LWSP-char is required is at the beginning of continuation lines in a folded field.

When passing text to processes that do not interpret text according to this standard (e.g., mail protocol servers), then no linear-white-space characters should occur between a period (".") or at-sign ("@") and a <word>. Exactly one SPACE should be used in place of arbitrary linear-white-space and comment sequences.

Note: Within systems conforming to this standard, wherever a member of the list of delimiters is allowed, LWSP-chars may also occur before and/or after it.

Writers of mail-sending (i.e., header-generating) programs

should realize that there is no network-wide definition of the effect of ASCII HT (horizontal-tab) characters on the appearance of text at another network host; therefore, the use of tabs in message headers, though permitted, is discouraged.

3.4.3. Comments

A comment is a set of ASCII characters, which is enclosed in matching parentheses and which is not within a quoted-string The comment construct permits message originators to add text which will be useful for human readers, but which will be ignored by the formal semantics. Comments should be retained while the message is subject to interpretation according to this standard. However, comments must not be included in other cases, such as during protocol exchanges with mail servers.

Comments nest, so that if an unquoted left parenthesis occurs in a comment string, there must also be a matching right parenthesis. When a comment acts as the delimiter between a sequence of two lexical symbols, such as two atoms, it is lexically equivalent with a single SPACE, for the purposes of regenerating the sequence, such as when passing the sequence

January 13, 1983

- 12 -

RFC #822

Standard for ARPA Internet Text Messages

onto a mail protocol server. Comments are detected as such only within field-bodies of structured fields.

If a comment is to be "folded" onto multiple lines, then the syntax for folding must be adhered to. (See the "Lexical Analysis of Messages" section on "Folding Long Header Fields" above, and the section on "Case Independence" below.) Note that the official semantics therefore do not "see" any unquoted CRLFs that are in comments, although particular parsing programs may wish to note their presence. For these programs, it would be reasonable to interpret a "CRLF LWSP-char"

as being a CRLF that is part of the comment; i.e., the CRLF is kept and the LWSP-char is discarded. Quoted CRLFs (i.e., a backslash followed by a CR followed by a LF) still must be followed by at least one LWSP-char.

3.4.4. Delimiting and Quoting Characters

The quote character (backslash) and characters that delimit syntactic units are not, generally, to be taken as data that are part of the delimited or quoted unit(s). In particular, the quotation-marks that define a quoted-string, the parentheses that define a comment and the backslash that quotes a following character are not part of the quoted-string, comment or quoted character. A quotation-mark that is to be part of a quoted-string, a parenthesis that is to be part of a comment and a backslash that is to be part of either must each be preceded by the quote-character backslash ("\"). Note that the syntax allows any character to be quoted within a quoted-string or comment; however only certain characters must be quoted to be included as data. These characters are the ones that are not part of the alternate text group (i.e., ctext or qtext).

The one exception to this rule is that a single SPACE is assumed to exist between contiguous words in a phrase, and this interpretation is independent of the actual number of LWSP-chars that the creator places between the words. To include more than one SPACE, the creator must make the LWSP-chars be part of a quoted-string.

Quotation marks that delimit a quoted string and backslashes that quote the following character should not accompany the quoted-string when the string is passed to processes that do not interpret data according to this specification (e.g., mail protocol servers).

9

9 January 13, 1983

- 13 -

RFC #822

3.4.5. Quoted-strings

Where permitted (i.e., in words in structured fields) quotedstrings are treated as a single symbol. That is, a quotedstring is equivalent to an atom, syntactically. If a quotedstring is to be "folded" onto multiple lines, then the syntax for folding must be adhered to. (See the "Lexical Analysis of Messages" section on "Folding Long Header Fields" above, and the section on "Case Independence" below.) Therefore, the official semantics do not "see" any bare CRLFs that are in quoted-strings; however particular parsing programs may wish to note their presence. For such programs, it would be reasonable to interpret a "CRLF LWSP-char" as being a CRLF which is part of the quoted-string; i.e., the CRLF is kept and the LWSP-char is discarded. Quoted CRLFs (i.e., a backslash followed by a CR followed by a LF) are also subject to rules of folding, but the presence of the quoting character (backslash) explicitly indicates that the CRLF is data to the quoted string. Stripping off the first following LWSP-char is also appropriate when parsing quoted CRLFs.

3.4.6. Bracketing Characters

There is one type of bracket which must occur in matched pairs and may have pairs nested within each other:

o Parentheses ("(" and ")") are used to indicate comments.

There are three types of brackets which must occur in matched pairs, and which may not be nested:

- o Colon/semi-colon (":" and ";") are used in address specifications to indicate that the included list of addresses are to be treated as a group.
- O Angle brackets ("<" and ">") are generally used to indicate the presence of a one machine-usable reference (e.g., delimiting mailboxes), possibly including source-routing to the machine.
- o Square brackets ("[" and "]") are used to indicate the presence of a domain-literal, which the appropriate name-domain is to use directly, bypassing normal name-resolution mechanisms.

3.4.7. Case Independence

Except as noted, alphabetic strings may be represented in any combination of upper and lower case. The only syntactic units which requires preservation of case information are:

- text
- qtext
- dtext
- ctext
- quoted-pair
- local-part, except "Postmaster"

When matching any other syntactic unit, case is to be ignored. For example, the field-names "From", "FROM", "from", and even "FroM" are semantically equal and should all be treated identically.

When generating these units, any mix of upper and lower case alphabetic characters may be used. The case shown in this specification is suggested for message-creating processes.

Note: The reserved local-part address unit, "Postmaster", is an exception. When the value "Postmaster" is being interpreted, it must be accepted in any mixture of case, including "POSTMASTER", and "postmaster".

3.4.8. Folding Long Header Fields

Each header field may be represented on exactly one line consisting of the name of the field and its body, and terminated by a CRLF; this is what the parser sees. For readability, the field-body portion of long header fields may be "folded" onto multiple lines of the actual field. "Long" is commonly inter-

preted to mean greater than 65 or 72 characters. The former length serves as a limit, when the message is to be viewed on most simple terminals which use simple display software; however, the limit is not imposed by this standard.

Note: Some display software often can selectively fold lines, to suit the display terminal. In such cases, sender-provided folding can interfere with the display software.

3.4.9. Backspace Characters

ASCII BS characters (Backspace, decimal 8) may be included in texts and quoted-strings to effect overstriking. However, any use of backspaces which effects an overstrike to the left of

January 13, 1983

- 15 -

RFC #822

Standard for ARPA Internet Text Messages

the beginning of the text or quoted-string is prohibited.

3.4.10. Network-specific Transformations

During transmission through heterogeneous networks, it may be necessary to force data to conform to a network's local conventions. For example, it may be required that a CR be followed either by LF, making a CRLF, or by <null>, if the CR is to stand alone). Such transformations are reversed, when the message exits that network.

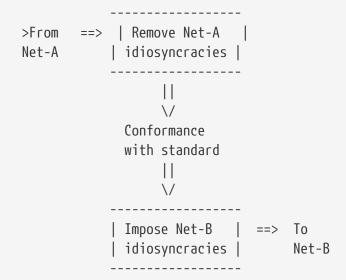
When crossing network boundaries, the message should be treated as passing through two modules. It will enter the first module containing whatever network-specific transformations that were necessary to permit migration through the "current" network. It then passes through the modules:

o Transformation Reversal

The "current" network's idiosyncracies are removed and the message is returned to the canonical form specified in this standard.

Transformation

The "next" network's local idiosyncracies are imposed on the message.



9

9 January 13, 1983 - 16 -

RFC #822

Standard for ARPA Internet Text Messages

4. MESSAGE SPECIFICATION

4.1. Syntax

Note: Due to an artifact of the notational conventions, the syn-

tax indicates that, when present, some fields, must be in a particular order. Header fields are not required to occur in any particular order, except that the message body must occur after the headers. It is recommended that, if present, headers be sent in the order "Return-Path", "Received", "Date", "From", "Subject", "Sender", "To", "cc", etc.

This specification permits multiple occurrences of most fields. Except as noted, their interpretation is not specified here, and their use is discouraged.

The following syntax for the bodies of various fields should be thought of as describing each field body as a single long string (or line). The "Lexical Analysis of Message" section on "Long Header Fields", above, indicates how such long strings can be represented on more than one line in the actual transmitted message.

```
message = fields *( CRLF *text )
                                    ; Everything after
                                     ; first null line
                                     ; is message body
fields
         = dates
                                    ; Creation time,
                                    ; author id & one
              source
            1*destination
                                    ; address required
             *optional-field
                                   ; others optional
                                 ; net traversals
          = [ trace ]
source
                                  ; original mail
              originator
           [ resent ]
                                    ; forwarded
                               ; path to sender
trace
         = return
            1*received
                                     ; receipt tags
         = "Return-path" ":" route-addr ; return address
return
```

9

9 January 13, 1983

- 17 -

RFC #822

```
received
          = "Received"
                                       ; one per relay
                ["from" domain]
                                        ; sending host
                ["by"
                                       ; receiving host
                        domain]
                ["via"
                                       ; physical path
                       atom]
               *("with" atom)
                                       ; link/mail protocol
                ["id"
                       msg-id]
                                       ; receiver msg id
                ["for"
                       addr-spec]
                                        ; initial form
                 ";"
                        date-time
                                        ; time received
                                        ; authenticated addr
originator = authentic
            [ "Reply-To"
                          ":" 1#address] )
                          ":"
              "From"
authentic
                                mailbox ; Single author
                          ":" mailbox ; Actual submittor
           / ( "Sender"
                          ":" 1#mailbox); Multiple authors
              "From"
                                        ; or not sender
           = resent-authentic
resent
             [ "Resent-Reply-To" ":" 1#address] )
resent-authentic =
                                ":"
           = "Resent-From"
                                     mailbox
           / ( "Resent-Sender"
                                ":" mailbox
              "Resent-From"
                                ":" 1#mailbox )
          = orig-date
                                        ; Original
dates
                                        ; Forwarded
             [ resent-date ]
orig-date = "Date"
                                date-time
resent-date = "Resent-Date" ":" date-time
destination = "To"
                          ":" 1#address ; Primary
           / "Resent-To"
                          ":" 1#address
           / "cc"
                          ":" 1#address ; Secondary
           / "Resent-cc"
                          ":" 1#address
                          ":" #address ; Blind carbon
           / "bcc"
           / "Resent-bcc" ":" #address
```

283

```
9
9
                      - 18 -
                                                            RFC #822
     January 13, 1983
    Standard for ARPA Internet Text Messages
    optional-field =
                                      ":" msg-id
                / "Message-ID"
                / "Resent-Message-ID" ":" msg-id
                                     ":" *(phrase / msg-id)
                / "In-Reply-To"
                / "References"
                                      ":" *(phrase / msg-id)
                                      ":" #phrase
                / "Keywords"
                                      ":" *text
                / "Subject"
                / "Comments"
                                      ":" *text
                / "Encrypted"
                                      ":" 1#2word
                / extension-field
                                              : To be defined
                / user-defined-field
                                              ; May be pre-empted
               = "<" addr-spec ">"
    msg-id
                                              ; Unique message id
    extension-field =
                  <Any field which is defined in a document
                   published as a formal extension to this
                   specification; none will have names beginning
                   with the string "X-">
    user-defined-field =
                  <Any field which has not been defined
                   in this specification or published as an
                   extension to this specification; names for
                   such fields must be unique and may be
                   pre-empted by published extensions>
    4.2. Forwarding
```

Some systems permit mail recipients to forward a message, retaining the original headers, by adding some new fields. This standard supports such a service, through the "Resent-" prefix to field names.

Whenever the string "Resent-" begins a field name, the field has the same semantics as a field whose name does not have the prefix. However, the message is assumed to have been forwarded by an original recipient who attached the "Resent-" field. This new field is treated as being more recent than the equivalent, original field. For example, the "Resent-From", indicates the person that forwarded the message, whereas the "From" field indicates the original author.

Use of such precedence information depends upon participants' communication needs. For example, this standard does not dictate when a "Resent-From:" address should receive replies, in lieu of sending them to the "From:" address.

Note: In general, the "Resent-" fields should be treated as containing a set of information that is independent of the

January 13, 1983

- 19 -

RFC #822

Standard for ARPA Internet Text Messages

set of original fields. Information for one set should not automatically be taken from the other. The interpretation of multiple "Resent-" fields, of the same type, is undefined.

In the remainder of this specification, occurrence of legal "Resent-" fields are treated identically with the occurrence of fields whose names do not contain this prefix.

4.3. Trace Fields

Trace information is used to provide an audit trail of message handling. In addition, it indicates a route back to the

sender of the message.

The list of known "via" and "with" values are registered with the Network Information Center, SRI International, Menlo Park, California.

4.3.1. Return-Path

This field is added by the final transport system that delivers the message to its recipient. The field is intended to contain definitive information about the address and route back to the message's originator.

Note: The "Reply-To" field is added by the originator and serves to direct replies, whereas the "Return-Path" field is used to identify a path back to the originator.

While the syntax indicates that a route specification is optional, every attempt should be made to provide that information in this field.

4.3.2. Received

A copy of this field is added by each transport service that relays the message. The information in the field can be quite useful for tracing transport problems.

The names of the sending and receiving hosts and time-ofreceipt may be specified. The "via" parameter may be used, to indicate what physical mechanism the message was sent over, such as Arpanet or Phonenet, and the "with" parameter may be used to indicate the mail-, or connection-, level protocol that was used, such as the SMTP mail protocol, or X.25 transport protocol.

9

9 January 13, 1983 - 20 -

RFC #822

Standard for ARPA Internet Text Messages

Note: Several "with" parameters may be included, to fully specify the set of protocols that were used.

Some transport services queue mail; the internal message identifier that is assigned to the message may be noted, using the "id" parameter. When the sending host uses a destination address specification that the receiving host reinterprets, by expansion or transformation, the receiving host may wish to record the original specification, using the "for" parameter. For example, when a copy of mail is sent to the member of a distribution list, this parameter may be used to record the original address that was used to specify the list.

4.4. Originator Fields

The standard allows only a subset of the combinations possible with the From, Sender, Reply-To, Resent-From, Resent-Sender, and Resent-Reply-To fields. The limitation is intentional.

4.4.1. From / Resent-From

This field contains the identity of the person(s) who wished this message to be sent. The message-creation process should default this field to be a single, authenticated machine address, indicating the agent (person, system or process) entering the message. If this is not done, the "Sender" field must be present. If the "From" field is defaulted this way, the "Sender" field is optional and is redundant with the "From" field. In all cases, addresses in the "From" field must be machine-usable (addr-specs) and may not contain named lists (groups).

4.4.2. Sender / Resent-Sender

This field contains the authenticated identity of the agent (person, system or process) that sends the message. It is intended for use when the sender is not the author of the message, or to indicate who among a group of authors actually sent the message. If the contents of the "Sender" field would be completely redundant with the "From" field, then the "Sender" field need not be present and its use is discouraged (though still legal). In particular, the "Sender" field must be present if it is not the same as the "From" Field.

The Sender mailbox specification includes a word sequence which must correspond to a specific agent (i.e., a human user or a computer program) rather than a standard address. This indicates the expectation that the field will identify the single agent (person, system, or process) responsible for

sending the mail and not simply include the name of a mailbox from which the mail was sent. For example in the case of a shared login name, the name, by itself, would not be adequate. The local-part address unit, which refers to this agent, is expected to be a computer system term, and not (for example) a generalized person reference which can be used outside the network text message context.

Since the critical function served by the "Sender" field is identification of the agent responsible for sending mail and since computer programs cannot be held accountable for their behavior, it is strongly recommended that when a computer program generates a message, the human who is responsible for that program be referenced as part of the "Sender" field mail-box specification.

4.4.3. Reply-To / Resent-Reply-To

This field provides a general mechanism for indicating any mailbox(es) to which responses are to be sent. Three typical uses for this feature can be distinguished. In the first case, the author(s) may not have regular machine-based mailboxes and therefore wish(es) to indicate an alternate machine address. In the second case, an author may wish additional persons to be made aware of, or responsible for, replies. A somewhat different use may be of some help to "text message teleconferencing" groups equipped with automatic distribution services: include the address of that service in the "Reply-To" field of all messages submitted to the teleconference; then participants can "reply" to conference submissions to guarantee the correct distribution of any submission of their own.

Note: The "Return-Path" field is added by the mail transport service, at the time of final deliver. It is intended

to identify a path back to the orginator of the message. The "Reply-To" field is added by the message originator and is intended to direct replies.

4.4.4. Automatic Use of From / Sender / Reply-To

For systems which automatically generate address lists for replies to messages, the following recommendations are made:

o The "Sender" field mailbox should be sent notices of any problems in transport or delivery of the original messages. If there is no "Sender" field, then the "From" field mailbox should be used.

9

9 January 13, 1983

- 22 -

RFC #822

Standard for ARPA Internet Text Messages

- o The "Sender" field mailbox should never be used automatically, in a recipient's reply message.
- o If the "Reply-To" field exists, then the reply should go to the addresses indicated in that field and not to the address(es) indicated in the "From" field.
- If there is a "From" field, but no "Reply-To" field, the reply should be sent to the address(es) indicated in the "From" field.

Sometimes, a recipient may actually wish to communicate with the person that initiated the message transfer. In such cases, it is reasonable to use the "Sender" address.

This recommendation is intended only for automated use of originator-fields and is not intended to suggest that replies may not also be sent to other recipients of messages. It is up to the respective mail-handling programs to decide what additional facilities will be provided.

Examples are provided in Appendix A.

4.5. Receiver Fields

4.5.1. To / Resent-To

This field contains the identity of the primary recipients of the message.

4.5.2. cc / Resent-cc

This field contains the identity of the secondary (informational) recipients of the message.

4.5.3. Bcc / Resent-Bcc

This field contains the identity of additional recipients of the message. The contents of this field are not included in copies of the message sent to the primary and secondary recipients. Some systems may choose to include the text of the "Bcc" field only in the author(s)'s copy, while others may also include it in the text sent to all those indicated in the "Bcc" list.

4.6. Reference Fields

9

9 January 13, 1983

- 23 -

RFC #822

Standard for ARPA Internet Text Messages

4.6.1. Message-ID / Resent-Message-ID

This field contains a unique identifier (the local-part address unit) which refers to this version of this message. The uniqueness of the message identifier is guaranteed by the host which generates it. This identifier is intended to be machine readable and not necessarily meaningful to humans. A

message identifier pertains to exactly one instantiation of a particular message; subsequent revisions to the message should each receive new message identifiers.

4.6.2. In-Reply-To

The contents of this field identify previous correspondence which this message answers. Note that if message identifiers are used in this field, they must use the msg-id specification format.

4.6.3. References

The contents of this field identify other correspondence which this message references. Note that if message identifiers are used, they must use the msg-id specification format.

4.6.4. Keywords

This field contains keywords or phrases, separated by commas.

4.7. Other Fields

4.7.1. Subject

This is intended to provide a summary, or indicate the nature, of the message.

4.7.2. Comments

Permits adding text comments onto the message without disturbing the contents of the message's body.

4.7.3. Encrypted

Sometimes, data encryption is used to increase the privacy of message contents. If the body of a message has been encrypted, to keep its contents private, the "Encrypted" field can be used to note the fact and to indicate the nature of the encryption. The first <word> parameter indicates the software used to encrypt the body, and the second, optional

January 13, 1983

- 24 -

RFC #822

Standard for ARPA Internet Text Messages

<word> is intended to aid the recipient in selecting the
proper decryption key. This code word may be viewed as an
index to a table of keys held by the recipient.

Note: Unfortunately, headers must contain envelope, as well as contents, information. Consequently, it is necessary that they remain unencrypted, so that mail transport services may access them. Since names, addresses, and "Subject" field contents may contain sensitive information, this requirement limits total message privacy.

Names of encryption software are registered with the Network Information Center, SRI International, Menlo Park, California.

4.7.4. Extension-field

A limited number of common fields have been defined in this document. As network mail requirements dictate, additional fields may be standardized. To provide user-defined fields with a measure of safety, in name selection, such extension-fields will never have names that begin with the string "X-".

Names of Extension-fields are registered with the Network Information Center, SRI International, Menlo Park, California.

4.7.5. User-defined-field

Individual users of network mail are free to define and use additional header fields. Such fields must have names which are not already used in the current specification or in any definitions of extension-fields, and the overall syntax of these user-defined-fields must conform to this specification's rules for delimiting and folding fields. Due to the extension-field publishing process, the name of a user-defined-field may be pre-empted

Note: The prefatory string "X-" will never be used in the names of Extension-fields. This provides user-defined fields with a protected set of names.

```
9
     January 13, 1983 - 25 -
                                                       RFC #822
9
    Standard for ARPA Internet Text Messages
    5. DATE AND TIME SPECIFICATION
    5.1. Syntax
    date-time = [ day "," ] date time ; dd mm yy
                                          ; hh:mm:ss zzz
              = "Mon" / "Tue" / "Wed" / "Thu"
    day
              / "Fri" / "Sat" / "Sun"
             = 1*2DIGIT month 2DIGIT ; day month year
    date
                                          ; e.g. 20 Jun 82
              = "Jan" / "Feb" / "Mar" / "Apr"
    month
              / "May" / "Jun" / "Jul" / "Aug"
               / "Sep" / "Oct" / "Nov" / "Dec"
    time
              = hour zone
                                           ; ANSI and Military
              = 2DIGIT ":" 2DIGIT [":" 2DIGIT]
    hour
                                          ; 00:00:00 - 23:59:59
              = "UT" / "GMT"
                                           ; Universal Time
    zone
                                           ; North American : UT
               / "EST" / "EDT"
                                          ; Eastern: - 5/ - 4
               / "CST" / "CDT"
                                          ; Central: - 6/ - 5
               / "MST" / "MDT"
                                         ; Mountain: - 7/ - 6
               / "PST" / "PDT"
                                          ; Pacific: - 8/ - 7
               / 1ALPHA
                                           ; Military: Z = UT;
```

```
; A:-1; (J not used)
                              ; M:-12; N:+1; Y:+12
/ ( ("+" / "-") 4DIGIT )
                             ; Local differential
                              ; hours+min. (HHMM)
```

5.2. Semantics

If included, day-of-week must be the day implied by the date specification.

Time zone may be indicated in several ways. "UT" is Universal Time (formerly called "Greenwich Mean Time"); "GMT" is permitted as a reference to Universal Time. The military standard uses a single character for each zone. "Z" is Universal Time. "A" indicates one hour earlier, and "M" indicates 12 hours earlier; "N" is one hour later, and "Y" is 12 hours later. The letter "J" is not used. The other remaining two forms are taken from ANSI standard X3.51-1975. One allows explicit indication of the amount of offset from UT; the other uses common 3-character strings for indicating time zones in North America.

January 13, 1983 - 26 -

RFC #822

Standard for ARPA Internet Text Messages

6. ADDRESS SPECIFICATION

6.1. Syntax

```
; one addressee
address = mailbox
         / group
                                  ; named list
         = phrase ":" [#mailbox] ";"
group
mailbox = addr-spec
                                  ; simple address
         / phrase route-addr ; name & addr-spec
route-addr = "<" [route] addr-spec ">"
```

route = 1#("@" domain) ":" ; path-relative

addr-spec = local-part "@" domain ; global address

local-part = word *("." word) ; uninterpreted

; case-preserved

domain = sub-domain *("." sub-domain)

sub-domain = domain-ref / domain-literal

domain-ref = atom ; symbolic reference

6.2. Semantics

A mailbox receives mail. It is a conceptual entity which does not necessarily pertain to file storage. For example, some sites may choose to print mail on their line printer and deliver the output to the addressee's desk.

A mailbox specification comprises a person, system or process name reference, a domain-dependent string, and a name-domain reference. The name reference is optional and is usually used to indicate the human name of a recipient. The name-domain reference specifies a sequence of sub-domains. The domain-dependent string is uninterpreted, except by the final sub-domain; the rest of the mail service merely transmits it as a literal string.

6.2.1. Domains

A name-domain is a set of registered (mail) names. A namedomain specification resolves to a subordinate name-domain specification or to a terminal domain-dependent string. Hence, domain specification is extensible, permitting any number of registration levels.

January 13, 1983 - 27 -

RFC #822

Standard for ARPA Internet Text Messages

Name-domains model a global, logical, hierarchical addressing scheme. The model is logical, in that an address specification is related to name registration and is not necessarily tied to transmission path. The model's hierarchy is a directed graph, called an in-tree, such that there is a single path from the root of the tree to any node in the hierarchy. If more than one path actually exists, they are considered to be different addresses.

The root node is common to all addresses; consequently, it is not referenced. Its children constitute "top-level" namedomains. Usually, a service has access to its own full domain specification and to the names of all top-level name-domains.

The "top" of the domain addressing hierarchy -- a child of the root -- is indicated by the right-most field, in a domain specification. Its child is specified to the left, its child to the left, and so on.

Some groups provide formal registration services; these constitute name-domains that are independent logically of specific machines. In addition, networks and machines implicitly compose name-domains, since their membership usually is registered in name tables.

In the case of formal registration, an organization implements a (distributed) data base which provides an address-to-route mapping service for addresses of the form:

person@registry.organization

Note that "organization" is a logical entity, separate from any particular communication network.

A mechanism for accessing "organization" is universally available. That mechanism, in turn, seeks an instantiation of the registry; its location is not indicated in the address specification. It is assumed that the system which operates under the name "organization" knows how to find a subordinate registry. The registry will then use the "person" string to determine where to send the mail specification.

The latter, network-oriented case permits simple, direct, attachment-related address specification, such as:

user@host.network

Once the network is accessed, it is expected that a message will go directly to the host and that the host will resolve

Standard for ARPA Internet Text Messages

the user name, placing the message in the user's mailbox.

6.2.2. Abbreviated Domain Specification

Since any number of levels is possible within the domain hierarchy, specification of a fully qualified address can become inconvenient. This standard permits abbreviated domain specification, in a special case:

For the address of the sender, call the left-most sub-domain Level n. In a header address, if all of the sub-domains above (i.e., to the right of) Level n are the same as those of the sender, then they do not have to appear in the specification. Otherwise, the address must be fully qualified.

This feature is subject to approval by local subdomains. Individual sub-domains may require their member systems, which originate mail, to provide full domain specification only. When permitted, abbreviations may be present only while the message stays within the sub-domain of the sender.

Use of this mechanism requires the sender's sub-domain to reserve the names of all top-level domains, so that full specifications can be distinguished from abbreviated specifications.

For example, if a sender's address is:

sender@registry-A.registry-1.organization-X

and one recipient's address is:

recipient@registry-B.registry-1.organization-X

and another's is:

recipient@registry-C.registry-2.organization-X

then ".registry-1.organization-X" need not be specified in the the message, but "registry-C.registry-2" does have to be specified. That is, the first two addresses may be abbreviated, but the third address must be fully specified.

When a message crosses a domain boundary, all addresses must be specified in the full format, ending with the top-level name-domain in the right-most field. It is the responsibility of mail forwarding services to ensure that addresses conform

January 13, 1983

- 29 -

RFC #822

Standard for ARPA Internet Text Messages

with this requirement. In the case of abbreviated addresses, the relaying service must make the necessary expansions. It should be noted that it often is difficult for such a service to locate all occurrences of address abbreviations. For example, it will not be possible to find such abbreviations within the body of the message. The "Return-Path" field can aid recipients in recovering from these errors.

Note: When passing any portion of an addr-spec onto a process which does not interpret data according to this standard (e.g., mail protocol servers). There must be no LWSP-chars preceding or following the at-sign or any delimiting period ("."), such as shown in the above examples, and only one SPACE between contiguous <word>s.

6.2.3. Domain Terms

A domain-ref must be the official name of a registry, network, or host. It is a symbolic reference, within a name sub-

domain. At times, it is necessary to bypass standard mechanisms for resolving such references, using more primitive information, such as a network host address rather than its associated host name.

To permit such references, this standard provides the domainliteral construct. Its contents must conform with the needs of the sub-domain in which it is interpreted.

Domain-literals which refer to domains within the ARPA Internet specify 32-bit Internet addresses, in four 8-bit fields noted in decimal, as described in Request for Comments #820, "Assigned Numbers." For example:

[10.0.3.19]

Note: The use of domain-literals is strongly discouraged. It is permitted only as a means of bypassing temporary system limitations, such as name tables which are not complete.

The names of "top-level" domains, and the names of domains under in the ARPA Internet, are registered with the Network Information Center, SRI International, Menlo Park, California.

6.2.4. Domain-Dependent Local String

The local-part of an addr-spec in a mailbox specification (i.e., the host's name for the mailbox) is understood to be

January 13, 1983 - 30 -

RFC #822

Standard for ARPA Internet Text Messages

whatever the receiving mail protocol server allows. For example, some systems do not understand mailbox references of the form "P. D. Q. Bach", but others do.

This specification treats periods (".") as lexical separators.

Hence, their presence in local-parts which are not quotedstrings, is detected. However, such occurrences carry no semantics. That is, if a local-part has periods within it, an address parser will divide the local-part into several tokens, but the sequence of tokens will be treated as one uninterpreted unit. The sequence will be re-assembled, when the address is passed outside of the system such as to a mail protocol service.

For example, the address:

First.Last@Registry.Org

is legal and does not require the local-part to be surrounded with quotation-marks. (However, "First Last" does require quoting.) The local-part of the address, when passed outside of the mail system, within the Registry.Org domain, is "First.Last", again without quotation marks.

6.2.5. Balancing Local-Part and Domain

In some cases, the boundary between local-part and domain can be flexible. The local-part may be a simple string, which is used for the final determination of the recipient's mailbox. All other levels of reference are, therefore, part of the domain.

For some systems, in the case of abbreviated reference to the local and subordinate sub-domains, it may be possible to specify only one reference within the domain part and place the other, subordinate name-domain references within the local-part. This would appear as:

mailbox.sub1.sub2@this-domain

Such a specification would be acceptable to address parsers which conform to RFC #733, but do not support this newer Internet standard. While contrary to the intent of this standard, the form is legal.

Also, some sub-domains have a specification syntax which does

9

9 January 13, 1983

- 31 -

RFC #822

Standard for ARPA Internet Text Messages

not conform to this standard. For example:

sub-net.mailbox@sub-domain.domain

uses a different parsing sequence for local-part than for domain.

Note: As a rule, the domain specification should contain fields which are encoded according to the syntax of this standard and which contain generally-standardized information. The local-part specification should contain only that portion of the address which deviates from the form or intention of the domain field.

6.2.6. Multiple Mailboxes

An individual may have several mailboxes and wish to receive mail at whatever mailbox is convenient for the sender to access. This standard does not provide a means of specifying "any member of" a list of mailboxes.

A set of individuals may wish to receive mail as a single unit (i.e., a distribution list). The <group> construct permits specification of such a list. Recipient mailboxes are specified within the bracketed part (":" - ";"). A copy of the transmitted message is to be sent to each mailbox listed. This standard does not permit recursive specification of groups within groups.

While a list must be named, it is not required that the contents of the list be included. In this case, the <address> serves only as an indication of group distribution and would appear in the form:

name:;

Some mail services may provide a group-list distribution facility, accepting a single mailbox reference, expanding it to the full distribution list, and relaying the mail to the list's members. This standard provides no additional syntax for indicating such a service. Using the <group> address alternative, while listing one mailbox in it, can mean either

that the mailbox reference will be expanded to a list or that there is a group with one member.

6.2.7. Explicit Path Specification

At times, a message originator may wish to indicate the transmission path that a message should follow. This is

January 13, 1983

- 32 -

RFC #822

Standard for ARPA Internet Text Messages

called source routing. The normal addressing scheme, used in an addr-spec, is carefully separated from such information; the <route> portion of a route-addr is provided for such occasions. It specifies the sequence of hosts and/or transmission services that are to be traversed. Both domain-refs and domain-literals may be used.

Note: The use of source routing is discouraged. Unless the sender has special need of path restriction, the choice of transmission route should be left to the mail transport service.

6.3. Reserved Address

It often is necessary to send mail to a site, without knowing any of its valid addresses. For example, there may be mail system dysfunctions, or a user may wish to find out a person's correct address, at that site.

This standard specifies a single, reserved mailbox address (local-part) which is to be valid at each site. Mail sent to that address is to be routed to a person responsible for the site's mail system or to a person with responsibility for general site operation. The name of the reserved local-part address is:

Postmaster

so that "Postmaster@domain" is required to be valid.

Note: This reserved local-part must be matched without sensitivity to alphabetic case, so that "POSTMASTER", "postmaster", and even "poStmASteR" is to be accepted.

9

9 January 13, 1983

- 33 -

RFC #822

Standard for ARPA Internet Text Messages

7. BIBLIOGRAPHY

ANSI. "USA Standard Code for Information Interchange," X3.4. American National Standards Institute: New York (1968). Also in: Feinler, E. and J. Postel, eds., "ARPANET Protocol Handbook", NIC 7104.

ANSI. "Representations of Universal Time, Local Time Differentials, and United States Time Zone References for Information Interchange," X3.51-1975. American National Standards Institute: New York (1975).

- Bemer, R.W., "Time and the Computer." In: Interface Age (Feb. 1979).
- Bennett, C.J. "JNT Mail Protocol". Joint Network Team, Rutherford and Appleton Laboratory: Didcot, England.
- Bhushan, A.K., Pogran, K.T., Tomlinson, R.S., and White, J.E. "Standardizing Network Mail Headers," ARPANET Request for Comments No. 561, Network Information Center No. 18516; SRI International: Menlo Park (September 1973).
- Birrell, A.D., Levin, R., Needham, R.M., and Schroeder, M.D. "Grapevine: An Exercise in Distributed Computing," Communications of the ACM 25, 4 (April 1982), 260-274.
- Crocker, D.H., Vittal, J.J., Pogran, K.T., Henderson, D.A. "Standard for the Format of ARPA Network Text Message," ARPANET Request for Comments No. 733, Network Information Center No. 41952. SRI International: Menlo Park (November 1977).
- Feinler, E.J. and Postel, J.B. ARPANET Protocol Handbook, Network Information Center No. 7104 (NTIS AD A003890). SRI International: Menlo Park (April 1976).
- Harary, F. "Graph Theory". Addison-Wesley: Reading, Mass. (1969).
- Levin, R. and Schroeder, M. "Transport of Electronic Messages through a Network," TeleInformatics 79, pp. 29-33. North Holland (1979). Also as Xerox Palo Alto Research Center Technical Report CSL-79-4.
- Myer, T.H. and Henderson, D.A. "Message Transmission Protocol," ARPANET Request for Comments, No. 680, Network Information Center No. 32116. SRI International: Menlo Park (1975).

January 13, 1983 - 34 - RFC #822

Standard for ARPA Internet Text Messages

- NBS. "Specification of Message Format for Computer Based Message Systems, Recommended Federal Information Processing Standard."

 National Bureau of Standards: Gaithersburg, Maryland (October 1981).
- NIC. Internet Protocol Transition Workbook. Network Information Center, SRI-International, Menlo Park, California (March 1982).
- Oppen, D.C. and Dalal, Y.K. "The Clearinghouse: A Decentralized Agent for Locating Named Objects in a Distributed Environment," OPD-T8103. Xerox Office Products Division: Palo Alto, CA. (October 1981).
- Postel, J.B. "Assigned Numbers," ARPANET Request for Comments, No. 820. SRI International: Menlo Park (August 1982).
- Postel, J.B. "Simple Mail Transfer Protocol," ARPANET Request for Comments, No. 821. SRI International: Menlo Park (August 1982).
- Shoch, J.F. "Internetwork naming, addressing and routing," in Proc. 17th IEEE Computer Society International Conference, pp. 72-79, Sept. 1978, IEEE Cat. No. 78 CH 1388-8C.
- Su, Z. and Postel, J. "The Domain Naming Convention for Internet User Applications," ARPANET Request for Comments, No. 819. SRI International: Menlo Park (August 1982).

9

APPENDIX

- H. EXAMPLES
- H.1. Addresses
- H.1.1. Alfred Neuman < Neuman@BBN-TENEXA>
- H.1.2. Neuman@BBN-TENEXA

These two "Alfred Neuman" examples have identical semantics, as far as the operation of the local host's mail sending (distribution) program (also sometimes called its "mailer") and the remote host's mail protocol server are concerned. In the first example, the "Alfred Neuman" is ignored by the mailer, as "Neuman@BBN-TENEXA" completely specifies the recipient. The second example contains no superfluous information, and, again, "Neuman@BBN-TENEXA" is the intended recipient.

Note: When the message crosses name-domain boundaries, then these specifications must be changed, so as to indicate the remainder of the hierarchy, starting with the top level.

H.1.3. "George, Ted" <Shared@Group.Arpanet>

This form might be used to indicate that a single mailbox is shared by several users. The quoted string is ignored by the originating host's mailer, because "Shared@Group.Arpanet" completely specifies the destination mailbox.

H.1.4. Wilt . (the Stilt) Chamberlain@NBA.US

The "(the Stilt)" is a comment, which is not included in the destination mailbox address handed to the originating system's mailer. The local-part of the address is the string "Wilt.Chamberlain", with no space between the first and second words.

H.1.5. Address Lists

Gourmets: Pompous Person < WhoZiWhatZit@Cordon-Bleu>,

Childs@WGBH.Boston, Galloping Gourmet@

ANT.Down-Under (Australian National Television),

Cheapie@Discount-Liquors;,

Cruisers: Port@Portugal, Jones@SEA;,

Another@Somewhere.SomeOrg

January 13, 1983 - 36 -

RFC #822

Standard for ARPA Internet Text Messages

This group list example points out the use of comments and the mixing of addresses and groups.

H.2. Originator Items

H.2.1. Author-sent

George Jones logs into his host as "Jones". He sends mail himself.

From: Jones@Group.Org

ОГ

From: George Jones <Jones@Group.Org>

H.2.2. Secretary-sent

George Jones logs in as Jones on his host. His secretary, who logs in as Secy sends mail for him. Replies to the

mail should go to George.

From: George Jones <Jones@Group>

Sender: Secy@Other-Group

H.2.3. Secretary-sent, for user of shared directory

George Jones' secretary sends mail for George. Replies should go to George.

From: George Jones<Shared@Group.Org>

Sender: Secy@Other-Group

Note that there need not be a space between "Jones" and the "<", but adding a space enhances readability (as is the case in other examples.

H.2.4. Committee activity, with one author

George is a member of a committee. He wishes to have any replies to his message go to all committee members.

From: George Jones <Jones@Host.Net>

Sender: Jones@Host

Reply-To: The Committee: Jones@Host.Net,

Smith@Other.Org,
Doe@Somewhere-Else;

Note that if George had not included himself in the

January 13, 1983 - 37 - RFC #822

Standard for ARPA Internet Text Messages

enumeration of The Committee, he would not have gotten an implicit reply; the presence of the "Reply-to" field supersedes the sending of a reply to the person named in the "From" field.

H.2.5. Secretary acting as full agent of author

George Jones asks his secretary (Secy@Host) to send a message for him in his capacity as Group. He wants his secretary to handle all replies.

From: George Jones <Group@Host>

Sender: Secy@Host Reply-To: Secy@Host

H.2.6. Agent for user without online mailbox

A friend of George's, Sarah, is visiting. George's secretary sends some mail to a friend of Sarah in computerland. Replies should go to George, whose mailbox is Jones at Registry.

From: Sarah Friendly <Secy@Registry>

Sender: Secy-Name <Secy@Registry>

Reply-To: Jones@Registry.

H.2.7. Agent for member of a committee

George's secretary sends out a message which was authored jointly by all the members of a committee. Note that the name of the committee cannot be specified, since <group> names are not permitted in the From field.

From: Jones@Host,

Smith@Other-Host,

Doe@Somewhere-Else

Sender: Secy@SHost

9

9 January 13, 1983

- 38 -

RFC #822

Standard for ARPA Internet Text Messages

H.3. Complete Headers

H.3.1. Minimum required

Date: 26 Aug 76 1429 EDT Date: 26 Aug 76 1429 EDT From: Jones@Registry.Org or From: Jones@Registry.Org Bcc: Smith@Registry.Org

Note that the "Bcc" field may be empty, while the "To" field is required to have at least one address.

H.3.2. Using some of the additional fields

Date: 26 Aug 76 1430 EDT

From: George Jones<Group@Host>

Sender: Secy@SHOST

To: "Al Neuman"@Mad-Host,

Sam.Irving@Other-Host

Message-ID: <some.string@SHOST>

H.3.3. About as complex as you're going to get

Date : 27 Aug 76 0932 PDT

>From : Ken Davis <KDavis@This-Host.This-net>

Subject : Re: The Syntax in the RFC

Sender : KSecy@Other-Host

Reply-To: Sam.Irving@Reg.Organization

To : George Jones <Group@Some-Reg.An-Org>,

Al.Neuman@MAD.Publisher

cc : Important folk:

Tom Softwood <Balsa@Tree.Root>,

"Sam Irving"@Other-Host;,

Standard Distribution:

/main/davis/people/standard@Other-Host,
"<Jones>standard.dist.3"@Tops-20-Host>;

Comment : Sam is away on business. He asked me to handle

his mail for him. He'll be able to provide a more accurate explanation when he returns

next week.

In-Reply-To: <some.string@DBM.Group>, George's message
X-Special-action: This is a sample of user-defined fieldnames. There could also be a field-name

"Special-action", but its name might later be

preempted

Message-ID: <4231.629.XYzi-What@Other-Host>

9

9 January 13, 1983 - 39 -

RFC #822

Standard for ARPA Internet Text Messages

I. SIMPLE FIELD PARSING

Some mail-reading software systems may wish to perform only minimal processing, ignoring the internal syntax of structured field-bodies and treating them the same as unstructured-fieldbodies. Such software will need only to distinguish:

- Header fields from the message body,
- Beginnings of fields from lines which continue fields,
- o Field-names from field-contents.

The abbreviated set of syntactic rules which follows will suffice for this purpose. It describes a limited view of messages and is a subset of the syntactic rules provided in the main part of this specification. One small exception is that the contents of field-bodies consist only of text:

I.1. Syntax

message = *field *(CRLF *text)

field = field-name ":" [field-body] CRLF

field-name = 1*<any CHAR, excluding CTLs, SPACE, and ":">

field-body = *text [CRLF LWSP-char field-body]

I.2. Semantics

Headers occur before the message body and are terminated by a null line (i.e., two contiguous CRLFs).

A line which continues a header field begins with a SPACE or HTAB character, while a line beginning a field starts with a printable character which is not a colon.

A field-name consists of one or more printable characters (excluding colon, space, and control-characters). A field-name must be contained on one line. Upper and lower case are not distinguished when comparing field-names.

9

9 January 13, 1983

- 40 -

RFC #822

Standard for ARPA Internet Text Messages

J. DIFFERENCES FROM RFC #733

The following summarizes the differences between this standard and the one specified in Arpanet Request for Comments #733, "Standard for the Format of ARPA Network Text Messages". The differences are listed in the order of their occurrence in the current specification.

J.1. Field Definitions

J.1.1. Field names

These now must be a sequence of printable characters. They may not contain any LWSP-chars.

J.2. Lexical Tokens

J.2.1. Specials

The characters period ("."), left-square bracket ("["), and right-square bracket ("]") have been added. For presentation purposes, and when passing a specification to a system that does not conform to this standard, periods are to be contiguous with their surrounding lexical tokens. No linear-white-space is permitted between them. The presence of one LWSP-char between other tokens is still directed.

J.2.2. Atom

Atoms may not contain SPACE.

J.2.3. Special text

ctext and qtext have had backslash ("\") added to the list of prohibited characters.

J.2.4. Domains

The lexical tokens <domain-literal> and <dtext> have been added.

J.3. Message Specification

J.3.1. Trace

The "Return-path:" and "Received:" fields have been specified.

9

9 January 13, 1983

- 41 -

RFC #822

Standard for ARPA Internet Text Messages

J.3.2. From

The "From" field must contain machine-usable addresses (addr-spec). Multiple addresses may be specified, but named-lists (groups) may not.

J.3.3. Resent

The meta-construct of prefacing field names with the string "Resent-" has been added, to indicate that a message has been forwarded by an intermediate recipient.

J.3.4. Destination

A message must contain at least one destination address field. "To" and "CC" are required to contain at least one address.

J.3.5. In-Reply-To

The field-body is no longer a comma-separated list, although a sequence is still permitted.

J.3.6. Reference

The field-body is no longer a comma-separated list, although a sequence is still permitted.

J.3.7. Encrypted

A field has been specified that permits senders to indicate that the body of a message has been encrypted.

J.3.8. Extension-field

Extension fields are prohibited from beginning with the characters "X-".

J.4. Date and Time Specification

J.4.1. Simplification

Fewer optional forms are permitted and the list of threeletter time zones has been shortened.

J.5. Address Specification

9

9 January 13, 1983

- 42 -

RFC #822

Standard for ARPA Internet Text Messages

1.5.1. Address

The use of quoted-string, and the ":"-atom-":" construct, have been removed. An address now is either a single mailbox reference or is a named list of addresses. The latter indicates a group distribution.

J.5.2. Groups

Group lists are now required to to have a name. Group lists may not be nested.

J.5.3. Mailbox

A mailbox specification may indicate a person's name, as before. Such a named list no longer may specify multiple mailboxes and may not be nested.

J.5.4. Route addressing

Addresses now are taken to be absolute, global specifications, independent of transmission paths. The <route> construct has been provided, to permit explicit specification of transmission path. RFC #733's use of multiple at-signs ("@") was intended as a general syntax for indicating routing and/or hierarchical addressing. The current standard separates these specifications and only one at-sign is permitted.

J.5.5. At-sign

The string " at " no longer is used as an address delimiter. Only at-sign ("@") serves the function.

J.5.6. Domains

Hierarchical, logical name-domains have been added.

J.6. Reserved Address

The local-part "Postmaster" has been reserved, so that users can be guaranteed at least one valid address at a site.

9

9 January 13, 1983

- 43 -

RFC #822

Standard for ARPA Internet Text Messages

K. ALPHABETICAL LISTING OF SYNTAX RULES

```
address
           = mailbox
                                         ; one addressee
           / group
                                         ; named list
          = local-part "@" domain
addr-spec
                                         ; global address
           = <any ASCII alphabetic character>
ALPHA
                                         ; (101-132, 65.- 90.)
                                         ; (141-172, 97.-122.)
           = 1*<any CHAR except specials, SPACE and CTLs>
atom
          = "From" ":" mailbox ; Single author
authentic
                           ":"
           / ( "Sender"
                                mailbox ; Actual submittor
              "From"
                           ":" 1#mailbox) ; Multiple authors
                                         ; or not sender
           = <any ASCII character>
CHAR
                                         ; ( 0-177, 0.-127.)
           = "(" *(ctext / quoted-pair / comment) ")"
comment
CR
           = <ASCII CR, carriage return> ; ( 15,
                                                        13.)
CRLF
           = CR LF
ctext
           = <any CHAR excluding "(", ; => may be folded
              ")", "\" & CR, & including
              linear-white-space>
CTL
           = <any ASCII control</pre>
                                         ; ( 0- 37, 0.- 31.)
                                         ; ( 177, 127.)
              character and DEL>
date
           = 1*2DIGIT month 2DIGIT
                                         ; day month year
```

```
; e.g. 20 Jun 82
                                                ; Original
    dates
                = orig-date
                  [ resent-date ]
                                                ; Forwarded
                = [ day "," ] date time
    date-time
                                                ; dd mm yy
                                                ; hh:mm:ss zzz
                = "Mon" / "Tue" / "Wed" / "Thu"
    day
                / "Fri" / "Sat" / "Sun"
    delimiters = specials / linear-white-space / comment
     destination = "To"
                                 ":" 1#address ; Primary
                                 ":" 1#address
                / "Resent-To"
                / "cc"
                                 ":" 1#address ; Secondary
                / "Resent-cc"
                                 ":" 1#address
                                 ":" #address ; Blind carbon
                / "bcc"
                / "Resent-bcc" ":" #address
    DIGIT
                = <any ASCII decimal digit>
                                              ; ( 60- 71, 48.- 57.)
                = sub-domain *("." sub-domain)
    domain
    domain-literal = "[" *(dtext / quoted-pair) "]"
     domain-ref = atom
                                                ; symbolic reference
                = <any CHAR excluding "[",
                                                ; => may be folded
    dtext
                    "]", "\" & CR, & including
                    linear-white-space>
9
                                                             RFC #822
9
     January 13, 1983
                                  - 44 -
    Standard for ARPA Internet Text Messages
    extension-field =
                  <Any field which is defined in a document
                   published as a formal extension to this
                   specification; none will have names beginning
                   with the string "X-">
                = field-name ":" [ field-body ] CRLF
     field
     fields
                     dates
                                                ; Creation time,
                                                ; author id & one
                     source
                   1*destination
                                                ; address required
```

```
*optional-field ; others optional
field-body = field-body-contents
             [CRLF LWSP-char field-body]
field-body-contents =
             <the ASCII characters making up the field-body, as
             defined in the following sections, and consisting
             of combinations of atom, quoted-string, and
             specials tokens, or else consisting of texts>
field-name = 1*<any CHAR, excluding CTLs, SPACE, and ":">
          = phrase ":" [#mailbox] ";"
group
          = 2DIGIT ":" 2DIGIT [":" 2DIGIT]
hour
                                        ; 00:00:00 - 23:59:59
          = <ASCII HT, horizontal-tab> ; (
HTAB
                                              11,
                                                         9.)
          = <ASCII LF, linefeed> ; (
                                               12,
                                                        10.)
linear-white-space = 1*([CRLF] LWSP-char) ; semantics = SPACE
                                        ; CRLF => folding
local-part = word *("." word)
                                        ; uninterpreted
                                        ; case-preserved
          = SPACE / HTAB
                                        ; semantics = SPACE
LWSP-char
mailbox
          = addr-spec
                                       ; simple address
          / phrase route-addr
                                       ; name & addr-spec
                                       ; Everything after
          = fields *( CRLF *text )
message
                                        ; first null line
                                        ; is message body
           = "Jan" / "Feb" / "Mar" / "Apr"
month
           / "May" / "Jun" / "Jul" / "Aug"
           / "Sep" / "Oct" / "Nov" / "Dec"
           = "<" addr-spec ">"
                                        ; Unique message id
msg-id
```

9

9 January 13, 1983

- 45 -

RFC #822

Standard for ARPA Internet Text Messages

```
optional-field =
                                 ":" msg-id
           / "Message-ID"
           / "Resent-Message-ID" ":" msg-id
           / "In-Reply-To"
                                 ":" *(phrase / msg-id)
           / "References"
                                 ":" *(phrase / msg-id)
                                 ":" #phrase
           / "Keywords"
                                 ":" *text
           / "Subject"
                                 ":" *text
           / "Comments"
                                 ":" 1#2word
           / "Encrypted"
           / extension-field
                                          ; To be defined
           / user-defined-field
                                          ; May be pre-empted
orig-date
           = "Date"
                                 date-time
                                          ; authenticated addr
originator = authentic
             [ "Reply-To"
                           ":" 1#address] )
phrase
           = 1*word
                                          ; Sequence of words
           = <any CHAR excepting <">,
                                          ; => may be folded
gtext
               "\" & CR, and including
               linear-white-space>
quoted-pair = "\" CHAR
                                          ; may quote any char
quoted-string = <"> *(qtext/quoted-pair) <">; Regular qtext or
                                          ; quoted chars.
                           п. п
           = "Received"
                                          ; one per relay
received
                 ["from" domain]
                                          ; sending host
                 ["by"
                        domain]
                                         ; receiving host
                 ["via"
                        atom]
                                         ; physical path
                *("with" atom)
                                         ; link/mail protocol
                 ["id"
                        msg-id]
                                         ; receiver msg id
                        addr-spec]
                                        ; initial form
                 ["for"
                  ";"
                        date-time
                                          ; time received
resent
               resent-authentic
             [ "Resent-Reply-To" ":" 1#address] )
resent-authentic =
               "Resent-From"
                                 ":"
                                      mailbox
           / ( "Resent-Sender"
                                 ":" mailbox
               "Resent-From"
                                ":" 1#mailbox )
resent-date = "Resent-Date" ":"
                                 date-time
return = "Return-path" ":" route-addr ; return address
           = 1#("@" domain) ":"
                                          ; path-relative
route
route-addr = "<" [route] addr-spec ">"
source
           = [ trace ]
                                          ; net traversals
                originator
                                          ; original mail
             [ resent ]
                                          ; forwarded
SPACE
           = <ASCII SP, space>
                                          ; (
                                                 40,
                                                          32.)
           = "(" / ")" / "<" / ">" / "@" ; Must be in quoted-
specials
           / "," / ";" / ":" / "\" / <"> ; string, to use
```

```
/ "." / "[" / "]" ; within a word.
    sub-domain = domain-ref / domain-literal
9
9
     January 13, 1983 - 46 -
                                                         RFC #822
    Standard for ARPA Internet Text Messages
               = <any CHAR, including bare ; => atoms, specials,
    text
                   CR & bare LF, but NOT
                                           ; comments and
                   including CRLF>
                                            ; quoted-strings are
                                           ; NOT recognized.
                                           ; ANSI and Military
    time
               = hour zone
                                            ; path to sender
    trace
               = return
                  1*received
                                            ; receipt tags
    user-defined-field =
                 <Any field which has not been defined
                  in this specification or published as an
                  extension to this specification; names for
                  such fields must be unique and may be
                  pre-empted by published extensions>
               = atom / quoted-string
    word
               = "UT" / "GMT"
                                            ; Universal Time
    zone
                                            ; North American : UT
                                           ; Eastern: - 5/ - 4
               / "EST" / "EDT"
                                           ; Central: - 6/ - 5
               / "CST" / "CDT"
                                          ; Mountain: - 7/ - 6
               / "MST" / "MDT"
               / "PST" / "PDT"
                                           ; Pacific: - 8/ - 7
                                           ; Military: Z = UT;
               / 1ALPHA
    <">
               = <ASCII quote mark>
                                           ; ( 42,
                                                         34.)
```

9 RFC #822 9 January 13, 1983 - 47 -RFC # 822 Obsoletes: RFC #733 (NIC #41952) STANDARD FOR THE FORMAT OF

ARPA INTERNET TEXT MESSAGES
January 13, 1983
Revised by
Nevised by
David H. Crocker
David n. Clocker
Dept. of Electrical Engineering
University of Delaware, Newark, DE 19711
Network: DCrocker @ UDel-Relay
9
9
Standard for ARPA Internet Text Messages
TABLE OF CONTENTS

PREFACE

ii

1.	INTRODUCTION	1
	1.1. Scope	1
2.	NOTATIONAL CONVENTIONS	3
3.	LEXICAL ANALYSIS OF MESSAGES	5
	3.1. General Description 3.2. Header Field Definitions 3.3. Lexical Tokens 3.4. Clarifications	5 9 10 11
4.	MESSAGE SPECIFICATION	17
	4.1. Syntax 4.2. Forwarding 4.3. Trace Fields 4.4. Originator Fields 4.5. Receiver Fields 4.6. Reference Fields 4.7. Other Fields	17 19 20 21 23 23 24
5.	DATE AND TIME SPECIFICATION	26
	5.1. Syntax	26 26
6.	ADDRESS SPECIFICATION	27
	6.1. Syntax	27 27 33
7.	BIBLIOGRAPHY	34
	APPENDIX	
Н.	EXAMPLES	36
Ι.	SIMPLE FIELD PARSING	40
J.	DIFFERENCES FROM RFC #733	41
Κ.	ALPHABETICAL LISTING OF SYNTAX RULES	44
Jan	nuary 13, 1983 - i - RFC #8	322

Standard for ARPA Internet Text Messages

9

9 January 13, 1983 - ii - RFC #822

UUCP Mail Interchange Format Standard

Network Working Group Request for Comments: 976 Mark. R. Horton Bell Laboratories February 1986

UUCP Mail Interchange Format Standard

Status of This Memo

In response to the need for maintenance of current information about the status and progress of various projects in the ARPA-Internet community, this RFC is issued for the benefit of community members. The information contained in this document is accurate as of the date of publication, but is subject to change. Subsequent RFCs will reflect such changes.

This document defines the standard format for the transmission of mail messages between machines in the UUCP Project. It does not address the format for storage of messages on one machine, nor the lower level transport mechanisms used to get the data from one machine to the next. It represents a standard for conformance by hosts in the UUCP zone. Distribution of this memo is unlimited.

1. Introduction

This document is intended to define the standard format for the transmission of mail messages between machines in the UUCP Project. It does not address the format for storage of messages on one machine, nor the lower level transport mechanisms used to get the data from one machine to the next. We assume remote execution of the rmail command (or equivalent) as the UUCP network primitive operation.

The general philosophy is that, if we were to invent a new standard, we would make ourselves incompatible with existing systems. There are already too many (incompatible) standards in the world, resulting in ambiguities such as a!b@c.d which is parsed a!(b@c.d) in the old UUCP world, and (a!b)@c.d in the Internet world. (Neither standard allows parentheses, and in adding them we would be compatible with neither. There would also be serious problems with the shell and with the UUCP transport mechanism.)

Having an established, well documented, and extensible family of standards already defined by the ARPA community, we choose to adopt these standards for the UUCP zone as well. (The UUCP zone is that subset of the community connected by UUCP which chooses to register with the UUCP project. It represents an administrative entity.)

While the actual transport mechanism is up to the two hosts to arrange, and might include UUCP, SMTP, MMDF, or some other facility, we adopt RFC-920 (domains) and RFC-822 (mail format) as UUCP zone standards. All mail transmitted between systems should conform to

Horton [Page 1]

RFC 976 February 1986

UUCP Mail Interchange Format Standard

those two standards. In addition, should the ARPA community change these standards at a later time, we intend to change our standards to remain compatible with theirs, given a reasonable time to upgrade software.

This document specifies an interpretation of RFC-822 and RFC-920 in the UUCP world. It shows how the envelope should be encoded, and how UUCP routing is accomplished in an environment of mixed implementations.

2. Basics

Messages can be divided into two parts: the envelope and the message. The envelope contains information needed by the mail transport services, and the message contains information useful to the sender and receiver. The message is divided into the header and the body. Sometimes an intermediate host will add to the message (e.g. a Received line) but, except in the case of a gateway which must translate formats, it is not expected that intermediate hosts will change the message itself. In the UUCP world, the envelope consists of the "destination addresses" (normally represented as the argument or arguments to the rmail command) and the "source path" (normally represented in one or more lines at the beginning of the message beginning either "From " or ">From ", sometimes called "From_ lines".) The RFC-822 header lines (including "From:" and "To:") are part of the message, as is the text of the message body itself.

UUCP uses short host names, such as "ucbvax", at and below the transport layer. We refer to these names as "6 letter names", because all implementations of UUCP consider at least the first 6 letters significant. (Some consider the first 7 or the first 14 significant, but we must use the lowest common denominator.) UUCP names may be longer than 6 characters, but all such names much be unique in their first 6 letters. RFC-920 domain names, such as "ucbvax.Berkeley.EDU", are called "domain names." The two names are different. Upper and lower case are usually considered different in 6 letter names, but are considered equivalent in domain names. Names

such as "ucbvax.UUCP", consisting of a 6 letter name followed by ".UUCP", previously were domain style references to a host with a given 6 letter name. Such names are being phased out in favor of organizational domain names such as "ucbvax.Berkeley.EDU"

Horton [Page 2]

RFC 976 UUCP Mail Interchange Format Standard February 1986

2.1 Hybrid Addresses

There are (among others) two major kinds of mailing address syntax used in the UUCP world. The a!b!c!user ("bang paths") is used by older UUCP software to explicitly route mail to the destination. The user@domain ("domain") syntax is used in conformance to RFC-822. Under most circumstances, it is possible to look at a given address and determine which sort of address it is. However, a hybrid address with a! to the left of an @, such as a!b@c, is ambiguous: it could be interpreted as (a!b)@c.d or a!(b@c.d). Both interpretations can be useful. The first interpretation is required by RFC-822, the second is a de-facto standard in the UUCP software.

Because of the confusion surrounding hybrid addresses, we recommend that all transport layer software avoid the use of hybrid addresses at all times. A pure bang syntax can be used to disambiguate, being written c.d!a!b in the first case above, and a!c.d!b in the second. We recommend that all implementations use this "bang domain" syntax unless they are sure of what is running on the next machine.

In conformance with RFC-822 and the AT&T Message Transfer Architecture, we recommand that any host that accepts hybrid addresses apply the (a!b)@c.d interpretation.

2.2 Transport

Since SMTP is not available to much of the UUCP domain, we define the method to be used for "remote execution" based transport mechanisms. The command to be "remotely executed" should read

rmail user@domain ...

with the message on the standard input of the command. The "user@domain" argument must conform to RFC-920 and RFC-822. More than one address argument is allowed, in order to save transmission costs for multiple recipients of the same message.

An alternative form that may be used is

rmail domain!user

where "domain" contains at least one period and no !'s. This is to be interpreted exactly the same as user@domain, and can be used to transport a message across old UUCP hosts without fear that they might change the address. The "user" string can contain any characters except "@". This character is forbidden because it is unknown what an intermediate host might do to it. (It is also

Horton [Page 3]

RFC 976 February 1986

UUCP Mail Interchange Format Standard

recommended that the "%" character be avoided, since some hosts treat "%" as a synonym for "@".) However, to route across hosts that don't understand domains, the following is possible

rmail a!b!c!domain!user

A "domain" can be distinguished from a 6 letter UUCP site name because a domain will contain at least one period. (In the case of single level domains with no periods, a period should be added to the end, e.g. Mark.Horton@att becomes "att.!Mark.Horton". A translator from ! to @ format should remove a trailing dot at the end of the domain, if one is present.) We don't expect this to happen, except for local networks using addresses like "user@host".

A simple implementation can always generate domain!user syntax (rather than user@domain) since it is safe to assume that gateways are class 3 (Classes are explained in section 3.5).

2.3 Batch SMTP

Standard conforming implementations may optionally support a protocol called "Batch SMTP". SMTP (Simple Mail Transfer Protocol) is the ARPA community standard mail transfer protocol (RFC-821). It is also used on BITNET and Mailnet. While SMTP was designed to be interactive, it is possible to batch up a series of commands and send

them off to a remote machine for batch execution. This is used on BITNET, and is appropriate for UUCP. One advantage to BSMTP is that the UNIX shell does not get involved in the interpretation of messages, so it becomes possible to include special characters such as space and parentheses in electronic messages. (Such characters are expected to be popular in X.400 addresses.)

To support BSMTP on UNIX, a conforming host should arrange that mail to the user "b-smtp" is interpreted as Batch SMTP commands. (We use b-smtp instead of bsmtp because bsmtp might conflict with a login name.) Since many mail systems treat lines consisting of a single period as an "end of file" flag, and since SMTP uses the period as a required end of file flag, and to strip off headers, we put an extra "#" at the beginning of each BSMTP line. On a sendmail system, an easy way to implement this is to include the alias

b-smtp: "|egrep '^#' | sed 's/^#//' | /usr/lib/sendmail -bs"

which will feed the commands to an SMTP interpreter. A better solution would appropriately check for errors and send back an error message to the sender.

Horton [Page 4]

RFC 976 February 1986

UUCP Mail Interchange Format Standard

An example BSMTP message from seismo.CSS.GOV to cbosgd.ATT.COM is shown here. This sample is the file shipped over the UUCP link for in put to the command "rmail b-smtp". Note that the RFC- 822 message is between the DATA line and the period line. The envelope information is passed in the MAIL FROM and RCPT TO lines. The name of the sending system is in the HELO line. The actual envelope information (above the # lines) is ignored and need not be present.

From foo!bar Sun Jan 12 23:59:00 1986 remote from seismo Date:

Tue, 18 Feb 86 13:07:36 EST

From: mark@ucbvax.Berkeley.EDU

Message-Id: <8602181807.AA10228@mark@ucbvax.Berkeley.EDU> To:

b-smtp@cbosqd.ATT.COM

#HELO seismo.CSS.GOV

#MAIL FROM:<mark@ucbvax.Berkeley.EDU>

#RCPT TO:<mark@cbosqd.ATT.COM>

#DATA

#Date: Tue, 18 Feb 86 13:07:36 EST

```
#From: mark@ucbvax.Berkeley.EDU
#Message-Id: <8602181807.AA10228@mark@ucbvax.Berkeley.EDU> #To:
mark@cbosgd.ATT.COM
#
#This is a sample message.
#.
#QUIT
```

2.4 Envelope

The standard input of the command should begin with a single line

From domain!user date remote from system

followed immediately by the RFC-822 format headers and body of the message. It is possible that there will be additional From_ lines preceding this line - these lines may be added, one line for each system the message passes through. It is also possible that the "system" fields will be stacked into a single line, with many !'s in the "user" string. The ">" character may precede the "From". In general, this is the "envelope" information, and should follow the same conventions that previous UUCP mail has followed. The primary difference is that, when the system names are stacked up, if previously the result would have been a!b!c!mysys!me, the new result will be a!b!c!mysys!domain!me, where domain will contain at least one period, and "mysys" is often the 6 letter UUCP name for the same

Horton [Page 5]

RFC 976 February 1986 UUCP Mail Interchange Format Standard

system named by "domain". If the "domain!" is redundant, it may be omitted from the envelope, either in the source path or in the destination address.

The receiving system may discard extra "From_" lines if it folds the information into a a single From_ line. It passes the path!domain!user along as the "envelope" information containing the address of the sender of the message, and possibly preserves the forwarding date and system in a newly generated header line, such as Received or Sent-By. (Adding Received using this information is discouraged, since the line appears to have been added on a different system than the one actually adding it. That other system may have actually included a Received line too! The Sent-By line is similar to

Received, but the date need not be converted into RFC-822 format, and the line is not claimed to have been added by the system whose name is mentioned.)

If the receiving system passes the message along to another system, it will add a "From_" line to the front, giving the same user@domain address for the sender, and its own name for the system. If the receiving system stores the message in a local mailbox, it is recommended that a single "From_" line be generated at the front of the message, keeping the date (in the same format, since certain mail reading programs are sensitive to this format), and not using the "remote from system" syntax.

Note - if an intermediate system adds text such as "system!" to the front of a "user@domain" syntax address, either in the envelope or the body, this is a violation of this standard and of RFC-822.

2.5 Routing

In order to properly route mail, it is sometimes necessary to know what software a destination or intermediate machine is running, or what conventions it follows. We have tried to minimize the amount of this information that is necessary, but the support of subdomains may require that different methods are used in different situations. For purposes of predicting the behavior of other hosts, we divide hosts into three classes. These classes are:

Class 1 old-style UUCP ! routing only. We assume that the host understands local user names:

rmail user

Horton [Page 6]

RFC 976 February 1986

UUCP Mail Interchange Format Standard

and bang paths

rmail host1!host2!user

but we assume nothing more about the host. If we have no information about a host, we can treat it as class 1 with no problems, since we make no assumptions about how it will handle hybrid addresses.

Class 2 Old style UUCP ! routing, and 4.2BSD style domain parsing. We assume the capabilities of class 1, plus the ability to understand

rmail user@domain

if the "domain" is one outside the UUCP zone which the host knows about. Class 2 hosts do not necessarily understand domain!user or have routers. Hosts in non-

UUCP RFC-920 domains are considered class 2, even though they may not understand host!user.

Class 3 All class 1 and 2 features are present. In addition, class 3 hosts must be able to route UUCP mail for hosts that are not immediately adjacent and also understand the syntax

rmail domain!user

as described above. All gateways into UUCP must be class 3.

This document describes what class 3 hosts must be able to process. Classes 1 and 2 already exist, and will continue to exist for a long time, but are viewed as "older systems" that may eventually be upgraded to class 3 status.

3. Algorithm

The algorithm for delivering a message to an address "user@domain" over UUCP links can be summarized as follows:

a. If the address is actually of the form @domain1:user@domain2, the "domain" used for the remainder should be "domain1" instead of "domain2", and the bang form reads domain1!domain2!user.

Horton [Page 7]

RFC 976 UUCP Mail Interchange Format Standard February 1986

b. Determine d: the most specific part of "domain" that is

recognized locally. This part will be a suffix of "domain". This can be done by scanning through a table with entries that go from specific to general, comparing entries with "domain" to see if the entries are at the tail of "domain". For example, with the address "mark@osgd.cb.att.com", if the local host recognizes "uucp" and "att.com", d would be "att.com". The final entry in the table will be the null string, matching any completely unrecognized domain.

- c. Look in the found table entry for g: the name of the "gateway", and for r: a UUCP !-style route to reach g. G is not necessarily directly connected to the local host, but should be viewed as a gateway into the d domain. (The values of g and r for a given d may be different on different hosts, although g will often be the same.)
- d. Look at the beginning of r to find the "next hop" host n. N will always be directly connected to the local host.
- e. Determine, if possible, the class of g and n.
- f. Create an appropriate destination string s to be interpreted by n. (See below.)
- g. Pass the message off to n with destination information s.

In an environment with other types of networks that do not use UUCP! parsing, the table will probably contain additional information, such as which type of link to use. The path information may be replaced in other environments by information specific to the network.

The first entries in the table mentioned in part (b) are normally very specific, and allow well known routes to be constructed directly instead of routing through the domain tree. The domain tree should be reserved for cases where no better information is available, or where traffic is very light, or where the default route is the best available. If a better route is available, that information can be put in the table. If a host has any significant amount of traffic sent to a second host, it is normally expected that the two hosts will set up a direct UUCP link and make an entry in their tables to send mail directly, even if they are in separate domains. Routing tables should be constructed to try to keep paths short and inexpensive for as much traffic as possible.

Horton [Page 8]

RFC 976 UUCP Mail Interchange Format Standard

Here are some hints for the construction of the destination string n (step f above.) The "envelope recipient" information (the argument(s) to rmail) may be in either domain! form (host.com!user) or domain @ form (user@host.com) as long as the sending site is sure the next hop is class 3. If the next hop is not class 3, or the sending site is not sure, the! form should be used, if possible, since it is hard to predict what the next hop would do with a hybrid address.

If the gateway is known to be class 3, domain ! form may be used, but if the sending site is not sure, and the entire destination string was matched in the lookup (rather than some parent domain), the 6 letter ! form should be used: r!user, for example: dumbhost!host!user. If the gateway appears to actually be a gateway for a subdomain, e.g. because a parent domain was matched, (such as the address user@host.gateway.com, where host.gateway.com was not found but gateway.com was) it can be assumed to be at class 3. This allows routes such as dumbhost!domain!host.domain.com!user to be used with a reasonable degree of safety. If a direct link exists to the destination host, the user@domain syntax or the domain!user syntax may be used.

All hosts conforming to this standard are class 3, and all subdomain gateways must be class 3 hosts.

4. Example

Suppose host A.D.COM sends mail to host C.D.COM. Let's suppose that the 6 letter names for these hosts are aname and dname, and that the intermediate host to be routed through has name bname.

The user on A types

mail user@c.d.com

The user interface creates a file such as

Date: 9 Jan 1985 8:39 EST From: myname@A.D.COM (My Name)

Subject: sample message

To: user@c.d.com

This is a sample message

and passes it to the transport mechanism with a command such as

Horton [Page 9]

RFC 976 February 1986 UUCP Mail Interchange Format Standard

sendmail user@c.d.com < file

The transport mechanism looks up a route to c.d.com. It does not find c.d.com in its database, so it looks up d.com, and finds that the path is bname!dname!%s, and that c.d.com is a class 3 host. Plugging in c.d.com!user, it gets the path bname!dname!c.d.com!user. (If it had found c.d.com with path bname!cname!%s, it would have omitted the domain from the resulting path: bname!cname!user, since it is not sure whether the destination host is class 1, 2, or 3.)

It prepends a From_ line and passes it to uux:

uux - bname!rmail dname!c.d.com!user < file2</pre>

where file2 contains

From A.D.COM!user Wed Jan 9 12:43:35 1985 remote from aname Date:

9 Jan 1985 8:39 EST

From: myname@A.D.COM (My Name)

Subject: sample message

To: user@c.d.com

This is a sample message

(Note the blank line at the end of the message - at least one blank line is required.) This results in the command

rmail dname!c.d.com!user

running on B. B prepends its own from line and passes the mail along:

uux - dname!rmail c.d.com!user < file3</pre>

where file3 contains

From nuucp Wed Jan 9 12:43:35 1985 remote from bname >From A.D.COM!user Wed Jan 9 11:21:48 1985 remote from aname Date: 9 Jan 1985 8:39 EST

From: myname@A.D.COM (My Name)

Subject: sample message

To: user@c.d.com

This is a sample message

Horton [Page 10]

RFC 976 February 1986

UUCP Mail Interchange Format Standard

The command

rmail c.d.com!user

is run on C, which stacks the From_ lines

From bname!aname!A.D.COM!user Wed Jan 9 12:43:35 1985 Date: 9

Jan 1985 8:39 EST

From: myname@A.D.COM (My Name)

Subject: sample message

To: user@c.d.com

This is a sample message

and stores the message locally, probably in this same format.

5. Summary

Hosts conforming to this standard should accept all of the following forms:

The "envelope" portion of the message ("From_" lines) should conform to existing conventions, using ! routing. The "heading" portion of the message (the Word: lines such as Date:, From:, To:, and Subject:) must conform to RFC-822. All header addresses must be in the @ form. The originating site should ensure that the addresses conform to RFC-822, since no requirement is placed on forwarding sites or gateways to transform addresses into legal RFC-822 format. (Such

forwarding sites and gateways should NOT, however, change a legal RFC-822 address such as user@domain into an illegal RFC-822 address such as gateway!user@domain, even if forwarding to a class 1 UUCP host.)

6. References

- [1] Postel, J., "Simple Mail Transfer Protocol", RFC-821, USC/Information Sciences Institute, August, 1982.
- [2] Crocker, D., "Standard for the Format of ARPA Internet Text Messages", RFC-822, Department of Electrical Engineering, University of Delaware, August, 1982.

Horton [Page 11]

RFC 976 February 1986
UUCP Mail Interchange Format Standard

[3] Postel, J., and J. K. Reynolds, "Domain Requirements", RFC-920, USC/Information Sciences Institute, October, 1984.



Standard for Interchange of USENET **Messages**

Network Working Group Request for Comments: 1036

Obsoletes: RFC-850

M. Horton AT&T Bell Laboratories R. Adams Center for Seismic Studies December 1987

Standard for Interchange of USENET Messages

STATUS OF THIS MEMO

This document defines the standard format for the interchange of network News messages among USENET hosts. It updates and replaces RFC-850, reflecting version B2.11 of the News program. This memo is disributed as an RFC to make this information easily accessible to the Internet community. It does not specify an Internet standard. Distribution of this memo is unlimited.

Introduction

This document defines the standard format for the interchange of network News messages among USENET hosts. It describes the format for messages themselves and gives partial standards for transmission of news. The news transmission is not entirely in order to give a good deal of flexibility to the hosts to choose transmission hardware and software, to batch news, and so on.

There are five sections to this document. Section two defines the format. Section three defines the valid control messages. Section four specifies some valid transmission methods. Section five describes the overall news propagation algorithm.

2. Message Format

The primary consideration in choosing a message format is that it fit in with existing tools as well as possible. Existing tools include implementations of both mail and news. (The notesfiles system from the University of Illinois is considered a news implementation.) A standard format for mail messages has existed for many years on the Internet, and this format meets most of the needs of USENET. Since the Internet format is extensible, extensions to meet the additional needs of USENET are easily made within the Internet standard. Therefore, the rule is adopted that all USENET news messages must be formatted as valid Internet mail messages, according to the Internet standard RFC-822. The USENET News standard is more restrictive than the Internet standard,

Horton & Adams [Page 1]

RFC 1036 Standard for USENET Messages December 1987

placing additional requirements on each message and forbidding use of certain Internet features. However, it should always be possible to use a tool expecting an Internet message to process a news message. In any situation where this standard conflicts with the Internet standard, RFC-822 should be considered correct and this standard in error.

Here is an example USENET message to illustrate the fields.

From: jerry@eagle.ATT.COM (Jerry Schwarz)
Path: cbosgd!mhuxj!mhuxt!eagle!jerry

Newsgroups: news.announce

Subject: Usenet Etiquette -- Please Read

Message-ID: <642@eagle.ATT.COM>
Date: Fri, 19 Nov 82 16:14:55 GMT

Followup-To: news.misc

Expires: Sat, 1 Jan 83 00:00:00 -0500

Organization: AT&T Bell Laboratories, Murray Hill

The body of the message comes here, after a blank line.

Here is an example of a message in the old format (before the existence of this standard). It is recommended that implementations also accept messages in this format to ease upward conversion.

From: cbosqd!mhuxj!mhuxt!eagle!jerry (Jerry Schwarz)

Newsgroups: news.misc

Title: Usenet Etiquette -- Please Read

Article-I.D.: eagle.642

Posted: Fri Nov 19 16:14:55 1982 Received: Fri Nov 19 16:59:30 1982 Expires: Mon Jan 1 00:00:00 1990

The body of the message comes here, after a blank line.

Some news systems transmit news in the A format, which looks like this:

Aeagle.642

news.misc cbosgd!mhuxj!mhuxt!eagle!jerry Fri Nov 19 16:14:55 1982 Usenet Etiquette - Please Read The body of the message comes here, with no blank line.

A standard USENET message consists of several header lines, followed by a blank line, followed by the body of the message. Each header

Horton & Adams [Page 2]

RFC 1036 Standard for USENET Messages December 1987

line consist of a keyword, a colon, a blank, and some additional information. This is a subset of the Internet standard, simplified to allow simpler software to handle it. The "From" line may optionally include a full name, in the format above, or use the Internet angle bracket syntax. To keep the implementations simple, other formats (for example, with part of the machine address after the close parenthesis) are not allowed. The Internet convention of continuation header lines (beginning with a blank or tab) is allowed.

Certain headers are required, and certain other headers are optional. Any unrecognized headers are allowed, and will be passed through unchanged. The required header lines are "From", "Date", "Newsgroups", "Subject", "Message-ID", and "Path". The optional header lines are "Followup-To", "Expires", "Reply-To", "Sender", "References", "Control", "Distribution", "Keywords", "Summary", "Approved", "Lines", "Xref", and "Organization". Each of these header lines will be described below.

2.1. Required Header lines

2.1.1. From

The "From" line contains the electronic mailing address of the person who sent the message, in the Internet syntax. It may optionally also contain the full name of the person, in parentheses, after the electronic address. The electronic address is the same as the entity responsible for originating the message, unless the "Sender" header is present, in which case the "From" header might not be verified. Note that in all host and domain names, upper and lower case are considered the same, thus "mark@cbosgd.ATT.COM", "mark@cbosgd.att.com", and "mark@CBosgD.ATt.COm" are all equivalent. User names may or may not be case sensitive, for example, "Billy@cbosgd.ATT.COM" might be different from "Billy@cbosgd.ATT.COM". Programs should avoid changing the case of

electronic addresses when forwarding news or mail.

RFC-822 specifies that all text in parentheses is to be interpreted as a comment. It is common in Internet mail to place the full name of the user in a comment at the end of the "From" line. This standard specifies a more rigid syntax. The full name is not considered a comment, but an optional part of the header line. Either the full name is omitted, or it appears in parentheses after the electronic address of the person posting the message, or it appears before an electronic address which is enclosed in angle brackets. Thus, the three permissible forms are:

Horton & Adams [Page 3]

RFC 1036 Standard for USENET Messages December 1987

From: mark@cbosqd.ATT.COM

From: mark@cbosgd.ATT.COM (Mark Horton)
From: Mark Horton <mark@cbosgd.ATT.COM>

Full names may contain any printing ASCII characters from space through tilde, except that they may not contain "(" (left parenthesis), ")" (right parenthesis), "<" (left angle bracket), or ">" (right angle bracket). Additional restrictions may be placed on full names by the mail standard, in particular, the characters "," (comma), ":" (colon), "@" (at), "!" (bang), "/" (slash), "=" (equal), and ";" (semicolon) are inadvisable in full names.

2.1.2. Date

The "Date" line (formerly "Posted") is the date that the message was originally posted to the network. Its format must be acceptable both in RFC-822 and to the getdate(3) routine that is provided with the Usenet software. This date remains unchanged as the message is propagated throughout the network. One format that is acceptable to both is:

Wdy, DD Mon YY HH:MM:SS TIMEZONE

Several examples of valid dates appear in the sample message above. Note in particular that ctime(3) format:

Wdy Mon DD HH:MM:SS YYYY

is not acceptable because it is not a valid RFC-822 date. However, since older software still generates this format, news

implementations are encouraged to accept this format and translate it into an acceptable format.

There is no hope of having a complete list of timezones. Universal Time (GMT), the North American timezones (PST, PDT, MST, MDT, CST, CDT, EST, EDT) and the +/-hhmm offset specifed in RFC-822 should be supported. It is recommended that times in message headers be transmitted in GMT and displayed in the local time zone.

2.1.3. Newsgroups

The "Newsgroups" line specifies the newsgroup or newsgroups in which the message belongs. Multiple newsgroups may be specified, separated by a comma. Newsgroups specified must all be the names of existing newsgroups, as no new newsgroups will be created by simply posting to them.

Horton & Adams [Page 4]

RFC 1036 Standard for USENET Messages December 1987

Wildcards (e.g., the word "all") are never allowed in a "Newsgroups" line. For example, a newsgroup comp.all is illegal, although a newsgroup rec.sport.football is permitted.

If a message is received with a "Newsgroups" line listing some valid newsgroups and some invalid newsgroups, a host should not remove invalid newsgroups from the list. Instead, the invalid newsgroups should be ignored. For example, suppose host A subscribes to the classes btl.all and comp.all, and exchanges news messages with host B, which subscribes to comp.all but not btl.all. Suppose A receives a message with Newsgroups: comp.unix,btl.general.

This message is passed on to B because B receives comp.unix, but B does not receive btl.general. A must leave the "Newsgroups" line unchanged. If it were to remove btl.general, the edited header could eventually re-enter the btl.all class, resulting in a message that is not shown to users subscribing to btl.general. Also, follow-ups from outside btl.all would not be shown to such users.

2.1.4. Subject

The "Subject" line (formerly "Title") tells what the message is about. It should be suggestive enough of the contents of the message to enable a reader to make a decision whether to read the message based on the subject alone. If the message is submitted in response to another message (e.g., is a follow-up) the default subject should begin with the four characters "Re:", and the "References" line is required. For follow-ups, the use of the "Summary" line is encouraged.

2.1.5. Message-ID

The "Message-ID" line gives the message a unique identifier. The Message-ID may not be reused during the lifetime of any previous message with the same Message-ID. (It is recommended that no Message-ID be reused for at least two years.) Message-ID's have the syntax:

<string not containing blank or ">">

In order to conform to RFC-822, the Message-ID must have the format:

<unique@full_domain_name>

where full_domain_name is the full name of the host at which the message entered the network, including a domain that host is in, and unique is any string of printing ASCII characters, not including "<" (left angle bracket), ">" (right angle bracket), or "@" (at sign).

Horton & Adams [Page 5]

RFC 1036 Standard for USENET Messages December 1987

For example, the unique part could be an integer representing a sequence number for messages submitted to the network, or a short string derived from the date and time the message was created. For example, a valid Message-ID for a message submitted from host ucbvax in domain "Berkeley.EDU" would be "<4123@ucbvax.Berkeley.EDU>". Programmers are urged not to make assumptions about the content of Message-ID fields from other hosts, but to treat them as unknown character strings. It is not safe, for example, to assume that a Message-ID will be under 14 characters, that it is unique in the first 14 characters, nor that is does not contain a "/".

The angle brackets are considered part of the Message-ID. Thus, in references to the Message-ID, such as the ihave/sendme and cancel control messages, the angle brackets are included. White space characters (e.g., blank and tab) are not allowed in a Message-ID. Slashes ("/") are strongly discouraged. All characters between the angle brackets must be printing ASCII characters.

2.1.6. Path

This line shows the path the message took to reach the current system. When a system forwards the message, it should add its own name to the list of systems in the "Path" line. The names may be separated by any punctuation character or characters (except "." which is considered part of the hostname). Thus, the following are valid entries:

cbosgd!mhuxj!mhuxt
cbosgd, mhuxj, mhuxt
@cbosgd.ATT.COM,@mhuxj.ATT.COM,@mhuxt.ATT.COM
teklabs, zehntel, sri-unix@cca!decvax

(The latter path indicates a message that passed through decvax, cca, sri-unix, zehntel, and teklabs, in that order.) Additional names should be added from the left. For example, the most recently added name in the fourth example was teklabs. Letters, digits, periods and hyphens are considered part of host names; other punctuation, including blanks, are considered separators.

Normally, the rightmost name will be the name of the originating system. However, it is also permissible to include an extra entry on the right, which is the name of the sender. This is for upward compatibility with older systems.

The "Path" line is not used for replies, and should not be taken as a mailing address. It is intended to show the route the message traveled to reach the local host. There are several uses for this information. One is to monitor USENET routing for performance

Horton & Adams [Page 6]

RFC 1036 Standard for USENET Messages December 1987

reasons. Another is to establish a path to reach new hosts. Perhaps the most important use is to cut down on redundant USENET traffic by failing to forward a message to a host that is known to have already received it. In particular, when host A sends a message to host B, the "Path" line includes A, so that host B will not immediately send the message back to host A. The name each host uses to identify itself should be the same as the name by which its neighbors know it, in order to make this optimization possible.

A host adds its own name to the front of a path when it receives a message from another host. Thus, if a message with path "A!X!Y!Z" is passed from host A to host B, B will add its own name to the path when it receives the message from A, e.g., "B!A!X!Y!Z". If B then passes the message on to C, the message sent to C will contain the path "B!A!X!Y!Z", and when C receives it, C will change it to

"C!B!A!X!Y!Z".

Special upward compatibility note: Since the "From", "Sender", and "Reply-To" lines are in Internet format, and since many USENET hosts do not yet have mailers capable of understanding Internet format, it would break the reply capability to completely sever the connection between the "Path" header and the reply function. It is recognized that the path is not always a valid reply string in older implementations, and no requirement to fix this problem is placed on implementations. However, the existing convention of placing the host name and an "!" at the front of the path, and of starting the path with the host name, an "!", and the user name, should be maintained when possible.

2.2. Optional Headers

2.2.1. Reply-To

This line has the same format as "From". If present, mailed replies to the author should be sent to the name given here. Otherwise, replies are mailed to the name on the "From" line. (This does not prevent additional copies from being sent to recipients named by the replier, or on "To" or "Cc" lines.) The full name may be optionally given, in parentheses, as in the "From" line.

2.2.2. Sender

This field is present only if the submitter manually enters a "From" line. It is intended to record the entity responsible for submitting the message to the network. It should be verified by the software at the submitting host.

Horton & Adams [Page 7]

RFC 1036 Standard for USENET Messages December 1987

For example, if John Smith is visiting CCA and wishes to post a message to the network, using friend Sarah Jones' account, the message might read:

From: smith@ucbvax.Berkeley.EDU (John Smith)

Sender: jones@cca.COM (Sarah Jones)

If a gateway program enters a mail message into the network at host unix.SRI.COM, the lines might read:

From: John.Doe@A.CS.CMU.EDU Sender: network@unix.SRI.COM

The primary purpose of this field is to be able to track down messages to determine how they were entered into the network. The full name may be optionally given, in parentheses, as in the "From" line.

2.2.3. Followup-To

This line has the same format as "Newsgroups". If present, follow-up messages are to be posted to the newsgroup or newsgroups listed here. If this line is not present, follow-ups are posted to the newsgroup or newsgroups listed in the "Newsgroups" line.

If the keyword poster is present, follow-up messages are not permitted. The message should be mailed to the submitter of the message via mail.

2.2.4. Expires

This line, if present, is in a legal USENET date format. It specifies a suggested expiration date for the message. If not present, the local default expiration date is used. This field is intended to be used to clean up messages with a limited usefulness, or to keep important messages around for longer than usual. For example, a message announcing an upcoming seminar could have an expiration date the day after the seminar, since the message is not useful after the seminar is over. Since local hosts have local policies for expiration of news (depending on available disk space, for instance), users are discouraged from providing expiration dates for messages unless there is a natural expiration date associated with the topic. System software should almost never provide a default "Expires" line. Leave it out and allow local policies to be used unless there is a good reason not to.

Horton & Adams [Page 8]

RFC 1036 Standard for USENET Messages December 1987

2.2.5. References

This field lists the Message-ID's of any messages prompting the submission of this message. It is required for all follow-up messages, and forbidden when a new subject is raised.

Implementations should provide a follow-up command, which allows a user to post a follow-up message. This command should generate a "Subject" line which is the same as the original message, except that if the original subject does not begin with "Re:" or "re:", the four characters "Re:" are inserted before the subject. If there is no "References" line on the original header, the "References" line should contain the Message-ID of the original message (including the angle brackets). If the original message does have a "References" line, the follow-up message should have a "References" line containing the text of the original "References" line, a blank, and the Message-ID of the original message.

The purpose of the "References" header is to allow messages to be grouped into conversations by the user interface program. This allows conversations within a newsgroup to be kept together, and potentially users might shut off entire conversations without unsubscribing to a newsgroup. User interfaces need not make use of this header, but all automatically generated follow-ups should generate the "References" line for the benefit of systems that do use it, and manually generated follow-ups (e.g., typed in well after the original message has been printed by the machine) should be encouraged to include them as well.

It is permissible to not include the entire previous "References" line if it is too long. An attempt should be made to include a reasonable number of backwards references.

2.2.6. Control

If a message contains a "Control" line, the message is a control message. Control messages are used for communication among USENET host machines, not to be read by users. Control messages are distributed by the same newsgroup mechanism as ordinary messages. The body of the "Control" header line is the message to the host.

For upward compatibility, messages that match the newsgroup pattern "all.all.ctl" should also be interpreted as control messages. If no "Control" header is present on such messages, the subject is used as the control message. However, messages on newsgroups matching this pattern do not conform to this standard.

Horton & Adams [Page 9]

RFC 1036 Standard for USENET Messages December 1987

Also for upward compatibility, if the first 4 characters of the "Subject:" line are "cmsg", the rest of the "Subject:" line should be interpreted as a control message.

2.2.7. Distribution

This line is used to alter the distribution scope of the message. It is a comma separated list similar to the "Newsgroups" line. User subscriptions are still controlled by "Newsgroups", but the message is sent to all systems subscribing to the newsgroups on the "Distribution" line in addition to the "Newsgroups" line. For the message to be transmitted, the receiving site must normally receive one of the specified newsgroups AND must receive one of the specified distributions. Thus, a message concerning a car for sale in New Jersey might have headers including:

Newsgroups: rec.auto,misc.forsale

Distribution: nj,ny

so that it would only go to persons subscribing to rec.auto or misc. for sale within New Jersey or New York. The intent of this header is to restrict the distribution of a newsgroup further, not to increase it. A local newsgroup, such as nj.crazy-eddie, will probably not be propagated by hosts outside New Jersey that do not show such a newsgroup as valid. A follow-up message should default to the same "Distribution" line as the original message, but the user can change it to a more limited one, or escalate the distribution if it was originally restricted and a more widely distributed reply is appropriate.

2.2.8. Organization

The text of this line is a short phrase describing the organization to which the sender belongs, or to which the machine belongs. The intent of this line is to help identify the person posting the message, since host names are often cryptic enough to make it hard to recognize the organization by the electronic address.

2.2.9. Keywords

A few well-selected keywords identifying the message should be on this line. This is used as an aid in determining if this message is interesting to the reader.

2.2.10. Summary

This line should contain a brief summary of the message. It is usually used as part of a follow-up to another message. Again, it

Horton & Adams [Page 10]

RFC 1036

Standard for USENET Messages

December 1987

is very useful to the reader in determining whether to read the message.

2.2.11. Approved

This line is required for any message posted to a moderated newsgroup. It should be added by the moderator and consist of his mail address. It is also required with certain control messages.

2.2.12. Lines

This contains a count of the number of lines in the body of the message.

2.2.13. Xref

This line contains the name of the host (with domains omitted) and a white space separated list of colon-separated pairs of newsgroup names and message numbers. These are the newsgroups listed in the "Newsgroups" line and the corresponding message numbers from the spool directory.

This is only of value to the local system, so it should not be transmitted. For example, in:

Path: seismo!lll-crg!lll-lcc!pyramid!decwrl!reid

From: reid@decwrl.DEC.COM (Brian Reid)
Newsgroups: news.lists,news.groups

Subject: USENET READERSHIP SUMMARY REPORT FOR SEP 86

Message-ID: <5658@decwrl.DEC.COM>

Date: 1 Oct 86 11:26:15 GMT

Organization: DEC Western Research Laboratory

lines: 441

Approved: reid@decwrl.UUCP

Xref: seismo news.lists:461 news.groups:6378

the "Xref" line shows that the message is message number 461 in the newsgroup news.lists, and message number 6378 in the newsgroup news.groups, on host seismo. This information may be used by certain user interfaces.

3. Control Messages

This section lists the control messages currently defined. The body of the "Control" header line is the control message. Messages are a sequence of zero or more words, separated by white space (blanks or

tabs). The first word is the name of the control message, remaining words are parameters to the message. The remainder of the header

Horton & Adams [Page 11]

RFC 1036 Standard for USENET Messages

December 1987

and the body of the message are also potential parameters; for example, the "From" line might suggest an address to which a response is to be mailed.

Implementors and administrators may choose to allow control messages to be carried out automatically, or to queue them for annual processing. However, manually processed messages should be dealt with promptly.

Failed control messages should NOT be mailed to the originator of the message, but to the local "usenet" account.

3.1. Cancel

cancel <Message-ID>

If a message with the given Message-ID is present on the local system, the message is cancelled. This mechanism allows a user to cancel a message after the message has been distributed over the network.

If the system is unable to cancel the message as requested, it should not forward the cancellation request to its neighbor systems.

Only the author of the message or the local news administrator is allowed to send this message. The verified sender of a message is the "Sender" line, or if no "Sender" line is present, the "From" line. The verified sender of the cancel message must be the same as either the "Sender" or "From" field of the original message. A verified sender in the cancel message is allowed to match an unverified "From" in the original message.

3.2. Ihave/Sendme

ihave <Message-ID list> [<remotesys>]
sendme <Message-ID list> [<remotesys>]

This message is part of the ihave/sendme protocol, which allows one host (say A) to tell another host (B) that a particular message has been received on A. Suppose that host A receives message

"<1234@ucbvax.Berkeley.edu>", and wishes to transmit the message to host B.

A sends the control message "ihave <1234@ucbvax.Berkeley.edu> A" to host B (by posting it to newsgroup to.B). B responds with the control message "sendme <1234@ucbvax.Berkeley.edu> B" (on newsgroup to.A), if it has not already received the message. Upon receiving

Horton & Adams [Page 12]

RFC 1036 Standard for USENET Messages December 1987

the sendme message, A sends the message to B.

This protocol can be used to cut down on redundant traffic between hosts. It is optional and should be used only if the particular situation makes it worthwhile. Frequently, the outcome is that, since most original messages are short, and since there is a high overhead to start sending a new message with UUCP, it costs as much to send the ihave as it would cost to send the message itself.

One possible solution to this overhead problem is to batch requests. Several Message-ID's may be announced or requested in one message. If no Message-ID's are listed in the control message, the body of the message should be scanned for Message-ID's, one per line.

3.3. Newgroup

newgroup <groupname> [moderated]

This control message creates a new newsgroup with the given name. Since no messages may be posted or forwarded until a newsgroup is created, this message is required before a newsgroup can be used. The body of the message is expected to be a short paragraph describing the intended use of the newsgroup.

If the second argument is present and it is the keyword moderated, the group should be created moderated instead of the default of unmoderated. The newgroup message should be ignored unless there is an "Approved" line in the same message header.

3.4. Rmgroup

rmgroup <groupname>

This message removes a newsgroup with the given name. Since the newsgroup is removed from every host on the network, this command should be used carefully by a responsible administrator. The

rmgroup message should be ignored unless there is an "Approved:" line in the same message header.

Horton & Adams [Page 13]

RFC 1036 Standard for USENET Messages

December 1987

3.5. Sendsys

sendsys (no arguments)

The sys file, listing all neighbors and the newsgroups to be sent to each neighbor, will be mailed to the author of the control message ("Reply-To", if present, otherwise "From"). This information is considered public information, and it is a requirement of membership in USENET that this information be provided on request, either automatically in response to this control message, or manually, by mailing the requested information to the author of the message. This information is used to keep the map of USENET up to date, and to determine where netnews is sent.

The format of the file mailed back to the author should be the same as that of the sys file. This format has one line per neighboring host (plus one line for the local host), containing four colon separated fields. The first field has the host name of the neighbor, the second field has a newsgroup pattern describing the newsgroups sent to the neighbor. The third and fourth fields are not defined by this standard. The sys file is not the same as the UUCP L.sys file. A sample response is:

From: cbosgd!mark (Mark Horton)
Date: Sun, 27 Mar 83 20:39:37 -0500

Subject: response to your sendsys request

To: mark@cbosqd.ATT.COM

Responding-System: cbosqd.ATT.COM

cbosgd:osg,cb,btl,bell,world,comp,sci,rec,talk,misc,news,soc,to,

test

ucbvax:world,comp,to.ucbvax:L:

cbosg:world,comp,bell,btl,cb,osg,to.cbosg:F:/usr/spool/outnews
 /cbosg

cbosgb:osg,to.cbosgb:F:/usr/spool/outnews/cbosgb

sescent:world,comp,bell,btl,cb,to.sescent:F:/usr/spool/outnews
/sescent

npois:world,comp,bell,btl,ug,to.npois:F:/usr/spool/outnews/npois
mhuxi:world,comp,bell,btl,ug,to.mhuxi:F:/usr/spool/outnews/mhuxi

3.6. Version

version (no arguments)

The name and version of the software running on the local system is to be mailed back to the author of the message ("Reply-to" if present, otherwise "From").

3.7. Checkgroups

Horton & Adams [Page 14]

RFC 1036 Standard for USENET Messages December 1987

The message body is a list of "official" newsgroups and their description, one group per line. They are compared against the list of active newsgroups on the current host. The names of any obsolete or new newsgroups are mailed to the user "usenet" and descriptions of the new newsgroups are added to the help file used when posting news.

4. Transmission Methods

USENET is not a physical network, but rather a logical network resting on top of several existing physical networks. These networks include, but are not limited to, UUCP, the Internet, an Ethernet, the BLICN network, an NSC Hyperchannel, and a BERKNET. What is important is that two neighboring systems on USENET have some method to get a new message, in the format listed here, from one system to the other, and once on the receiving system, processed by the netnews software on that system. (On UNIX systems, this usually means the rnews program being run with the message on the standard input. <1>)

It is not a requirement that USENET hosts have mail systems capable of understanding the Internet mail syntax, but it is strongly recommended. Since "From", "Reply-To", and "Sender" lines use the Internet syntax, replies will be difficult or impossible without an Internet mailer. A host without an Internet mailer can attempt to use the "Path" header line for replies, but this field is not

guaranteed to be a working path for replies. In any event, any host generating or forwarding news messages must have an Internet address that allows them to receive mail from hosts with Internet mailers, and they must include their Internet address on their From line.

4.1. Remote Execution

Some networks permit direct remote command execution. On these networks, news may be forwarded by spooling the rnews command with the message on the standard input. For example, if the remote system is called remote, news would be sent over a UUCP link with the command:

uux - remote!rnews

and on a Berknet:

net -mremote rnews

Horton & Adams [Page 15]

RFC 1036 Standard for USENET Messages December 1987

It is important that the message be sent via a reliable mechanism, normally involving the possibility of spooling, rather than direct real-time remote execution. This is because, if the remote system is down, a direct execution command will fail, and the message will never be delivered. If the message is spooled, it will eventually be delivered when both systems are up.

4.2. Transfer by Mail

On some systems, direct remote spooled execution is not possible. However, most systems support electronic mail, and a news message can be sent as mail. One approach is to send a mail message which is identical to the news message: the mail headers are the news headers, and the mail body is the news body. By convention, this mail is sent to the user newsmail on the remote machine.

One problem with this method is that it may not be possible to convince the mail system that the "From" line of the message is valid, since the mail message was generated by a program on a system different from the source of the news message. Another problem is that error messages caused by the mail transmission

would be sent to the originator of the news message, who has no control over news transmission between two cooperating hosts and does not know whom to contact. Transmission error messages should be directed to a responsible contact person on the sending machine.

A solution to this problem is to encapsulate the news message into a mail message, such that the entire message (headers and body) are part of the body of the mail message. The convention here is that such mail is sent to user rnews on the remote system. A mail message body is generated by prepending the letter N to each line of the news message, and then attaching whatever mail headers are convenient to generate. The N's are attached to prevent any special lines in the news message from interfering with mail transmission, and to prevent any extra lines inserted by the mailer (headers, blank lines, etc.) from becoming part of the news message. A program on the receiving machine receives mail to rnews, extracting the message itself and invoking the rnews program. An example in this format might look like this:

Horton & Adams [Page 16]

RFC 1036

Standard for USENET Messages

December 1987

Date: Mon, 3 Jan 83 08:33:47 MST

From: news@cbosgd.ATT.COM Subject: network news message

To: rnews@npois.ATT.COM

NPath: cbosqd!mhuxj!harpo!utah-cs!sask!derek

NFrom: derek@sask.UUCP (Derek Andrew)

NNewsgroups: misc.test NSubject: necessary test NMessage-ID: <176@sask.UUCP> NDate: Mon, 3 Jan 83 00:59:15 MST

N

NThis really is a test. If anyone out there more than 6 Nhops away would kindly confirm this note I would Nappreciate it. We suspect that our news postings Nare not getting out into the world.

Using mail solves the spooling problem, since mail must always be spooled if the destination host is down. However, it adds more overhead to the transmission process (to encapsulate and extract the message) and makes it harder for software to give different priorities to news and mail.

4.3. Batching

Since news messages are usually short, and since a large number of messages are often sent between two hosts in a day, it may make sense to batch news messages. Several messages can be combined into one large message, using conventions agreed upon in advance by the two hosts. One such batching scheme is described here; its use is highly recommended.

News messages are combined into a script, separated by a header of the form:

#! rnews 1234

where 1234 is the length of the message in bytes. Each such line is followed by a message containing the given number of bytes. (The newline at the end of each line of the message is counted as one byte, for purposes of this count, even if it is stored as <CARRIAGE RETURN><LINE FEED>.) For example, a batch of message might look like this:

Horton & Adams [Page 17]

RFC 1036 Standard for USENET Messages December 1987

#! rnews 239

From: jerry@eagle.ATT.COM (Jerry Schwarz)
Path: cbosgd!mhuxj!mhuxt!eagle!jerry

Newsgroups: news.announce

Subject: Usenet Etiquette -- Please Read

Message-ID: <642@eagle.ATT.COM> Date: Fri, 19 Nov 82 16:14:55 EST Approved: mark@cbosgd.ATT.COM

Here is an important message about USENET Etiquette.

#! rnews 234

From: jerry@eagle.ATT.COM (Jerry Schwarz)

Path: cbosgd!mhuxj!mhuxt!eagle!jerry

Newsgroups: news.announce

Subject: Notes on Etiquette message Message-ID: <643@eagle.ATT.COM> Date: Fri, 19 Nov 82 17:24:12 EST Approved: mark@cbosgd.ATT.COM

There was something I forgot to mention in the last message.

Batched news is recognized because the first character in the message is #. The message is then passed to the unbatcher for interpretation.

The second argument (in this example rnews) determines which batching scheme is being used. Cooperating hosts may use whatever scheme is appropriate for them.

5. The News Propagation Algorithm

This section describes the overall scheme of USENET and the algorithm followed by hosts in propagating news to the entire logical network. Since all hosts are affected by incorrectly formatted messages and by propagation errors, it is important for the method to be standardized.

USENET is a directed graph. Each node in the graph is a host computer, and each arc in the graph is a transmission path from one host to another host. Each arc is labeled with a newsgroup pattern, specifying which newsgroup classes are forwarded along that link. Most arcs are bidirectional, that is, if host A sends a class of newsgroups to host B, then host B usually sends the same class of newsgroups to host A. This bidirectionality is not, however, required.

USENET is made up of many subnetworks. Each subnet has a name, such

Horton & Adams [Page 18]

RFC 1036 Standard for USENET Messages December 1987

as comp or btl. Each subnet is a connected graph, that is, a path exists from every node to every other node in the subnet. In addition, the entire graph is (theoretically) connected. (In practice, some political considerations have caused some hosts to be unable to post messages reaching the rest of the network.)

A message is posted on one machine to a list of newsgroups. That machine accepts it locally, then forwards it to all its neighbors that are interested in at least one of the newsgroups of the message. (Site A deems host B to be "interested" in a newsgroup if the newsgroup matches the pattern on the arc from A to B. This pattern is stored in a file on the A machine.) The hosts receiving the incoming message examine it to make sure they really want the message, accept it locally, and then in turn forward the message to all their interested neighbors. This process continues until the entire network has seen the message.

An important part of the algorithm is the prevention of loops. The above process would cause a message to loop along a cycle forever. In particular, when host A sends a message to host B, host B will send it back to host A, which will send it to host B, and so on. One solution to this is the history mechanism. Each host keeps track of all messages it has seen (by their Message-ID) and whenever a message comes in that it has already seen, the incoming message is discarded immediately. This solution is sufficient to prevent loops, but additional optimizations can be made to avoid sending messages to hosts that will simply throw them away.

One optimization is that a message should never be sent to a machine listed in the "Path" line of the header. When a machine name is in the "Path" line, the message is known to have passed through the machine. Another optimization is that, if the message originated on host A, then host A has already seen the message. Thus, if a message is posted to newsgroup misc.misc, it will match the pattern misc.all (where all is a metasymbol that matches any string), and will be forwarded to all hosts that subscribe to misc.all (as determined by what their neighbors send them). These hosts make up the misc subnetwork. A message posted to btl.general will reach all hosts receiving btl.all, but will not reach hosts that do not get btl.all. In effect, the messages reaches the btl subnetwork. A messages posted to newsgroups misc.misc,btl.general will reach all hosts subscribing to either of the two classes.

Notes

<1> UNIX is a registered trademark of AT&T.

Horton & Adams [Page 19]

Choosing a Name for Your Computer

Network Working Group Request for Comments: 1178 FYI: 5 D. Libes Integrated Systems Group/NIST August 1990

Choosing a Name for Your Computer

Status of this Memo

This FYI RFC is a republication of a Communications of the ACM article on guidelines on what to do and what not to do when naming your computer [1]. This memo provides information for the Internet community. It does not specify any standard.

Distribution of this memo is unlimited.

Abstract

In order to easily distinguish between multiple computers, we give them names. Experience has taught us that it is as easy to choose bad names as it is to choose good ones. This essay presents guidelines for deciding what makes a name good or bad.

Keywords: domain name system, naming conventions, computer administration, computer network management

Introduction

As soon as you deal with more than one computer, you need to distinguish between them. For example, to tell your system administrator that your computer is busted, you might say, "Hey Ken. Goon is down!"

Computers also have to be able to distinguish between themselves. Thus, when sending mail to a colleague at another computer, you might use the command "mail libes@goon".

In both cases, "goon" refers to a particular computer. How the name is actually dereferenced by a human or computer need not concern us here. This essay is only concerned with choosing a "good" name. (It is assumed that the reader has a basic understanding of the domain name system as described by [2].)

By picking a "good" name for your computer, you can avoid a number of problems that people stumble over again and again.

Here are some guidelines on what NOT to do.

Libes [Page 1]

RFC 1178 Name Your Computer August 1990

Don't overload other terms already in common use.

Using a word that has strong semantic implications in the current context will cause confusion. This is especially true in conversation where punctuation is not obvious and grammar is often incorrect.

For example, a distributed database had been built on top of several computers. Each one had a different name. One machine was named "up", as it was the only one that accepted updates. Conversations would sound like this: "Is up down?" and "Boot the machine up." followed by "Which machine?"

While it didn't take long to catch on and get used to this zaniness, it was annoying when occasionally your mind would stumble, and you would have to stop and think about each word in a sentence. It is as if, all of a sudden, English has become a foreign language.

Don't choose a name after a project unique to that machine.

A manufacturing project had named a machine "shop" since it was going to be used to control a number of machines on a shop floor. A while later, a new machine was acquired to help with some of the processing. Needless to say, it couldn't be called "shop" as well. Indeed, both machines ended up performing more specific tasks, allowing more precision in naming. A year later, five new machines were installed and the original one was moved to an unrelated project. It is simply impossible to choose generic names that remain appropriate for very long.

Of course, they could have called the second one "shop2" and so on. But then one is really only distinguishing machines by their number. You might as well just call them "1", "2", and "3". The only time this kind of naming scheme is appropriate is when you have a lot of machines and there are no reasons for any human to distinguish between them. For example, a master computer might be controlling an array of one hundred computers. In this case, it makes sense to refer to them with the array indices.

While computers aren't quite analogous to people, their names

are. Nobody expects to learn much about a person by their name. Just because a person is named "Don" doesn't mean he is the ruler of the world (despite what the "Choosing a Name for your Baby" books say). In reality, names are just arbitrary tags. You cannot tell what a person does for a living, what their hobbies are, and so on.

Libes [Page 2]

RFC 1178

Name Your Computer

August 1990

Don't use your own name.

Even if a computer is sitting on your desktop, it is a mistake to name it after yourself. This is another case of overloading, in which statements become ambiguous. Does "give the disk drive to don" refer to a person or computer?

Even using your initials (or some other moniker) is unsatisfactory. What happens if I get a different machine after a year? Someone else gets stuck with "don" and I end up living with "jim". The machines can be renamed, but that is excess work and besides, a program that used a special peripheral or database on "don" would start failing when it wasn't found on the "new don".

It is especially tempting to name your first computer after yourself, but think about it. Do you name any of your other possessions after yourself? No. Your dog has its own name, as do your children. If you are one of those who feel so inclined to name your car and other objects, you certainly don't reuse your own name. Otherwise you would have a great deal of trouble distinguishing between them in speech.

For the same reason, it follows that naming your computer the same thing as your car or another possession is a mistake.

Don't use long names.

This is hard to quantify, but experience has shown that names longer than eight characters simply annoy people.

Most systems will allow prespecified abbreviations, but why not choose a name that you don't have to abbreviate to begin with? This removes any chance of confusion.

Avoid alternate spellings.

Once we called a machine "czek". In discussion, people continually thought we were talking about a machine called "check". Indeed, "czek" isn't even a word (although "Czech" is).

Purposely incorrect (but cute) spellings also tend to annoy a large subset of people. Also, people who have learned English as a second language often question their own knowledge upon seeing a word that they know but spelled differently. ("I guess I've always been spelling "funxion" incorrectly. How embarrassing!")

Libes [Page 3]

RFC 1178

Name Your Computer

August 1990

By now you may be saying to yourself, "This is all very silly...people who have to know how to spell a name will learn it and that's that." While it is true that some people will learn the spelling, it will eventually cause problems somewhere.

For example, one day a machine named "pythagoris" (sic) went awry and began sending a tremendous number of messages to the site administrator's computer. The administrator, who wasn't a very good speller to begin with, had never seen this machine before (someone else had set it up and named it), but he had to deal with it since it was clogging up the network as well as bogging down his own machine which was logging all the errors. Needless to say, he had to look it up every time he needed to spell "pythagoris". (He suspected there was an abbreviation, but he would have had to log into yet another computer (the local nameserver) to find out and the network was too jammed to waste time doing that.)

Avoid domain names.

For technical reasons, domain names should be avoided. In particular, name resolution of non-absolute hostnames is problematic. Resolvers will check names against domains before checking them against hostnames. But we have seen instances of mailers that refuse to treat single token names as domains. For example, assume that you mail to "libes@rutgers" from yale.edu. Depending upon the implementation, the mail may go to rutgers.edu or rutgers.yale.edu (assuming both exist).

Avoid domain-like names.

Domain names are either organizational (e.g., cia.gov) or geographical (e.g., dallas.tx.us). Using anything like these tends to imply some connection. For example, the name "tahiti" sounds like it means you are located there. This is confusing if it is really somewhere else (e.g., "tahiti.cia.gov is located in Langley, Virginia? I thought it was the CIA's Tahiti office!"). If it really is located there, the name implies that it is the only computer there. If this isn't wrong now, it inevitably will be.

There are some organizational and geographical names that work fine. These are exactly the ones that do not function well as domain names. For example, amorphous names such as rivers, mythological places and other impossibilities are very suitable. ("earth" is not yet a domain name.)

Libes [Page 4]

RFC 1178 Name Your Computer August 1990

Don't use antagonistic or otherwise embarrassing names.

Words like "moron" or "twit" are good names if no one else is going to see them. But if you ever give someone a demo on your machine, you may find that they are distracted by seeing a nasty word on your screen. (Maybe their spouse called them that this morning.) Why bother taking the chance that they will be turned off by something completely irrelevant to your demo.

Don't use digits at the beginning of the name.

Many programs accept a numerical internet address as well as a name. Unfortunately, some programs do not correctly distinguish between the two and may be fooled, for example, by a string beginning with a decimal digit.

Names consisting entirely of hexadecimal digits, such as "beef", are also problematic, since they can be interpreted entirely as hexadecimal numbers as well as alphabetic strings.

Don't use non-alphanumeric characters in a name.

Your own computer may handle punctuation or control characters in a name, but most others do not. If you ever expect to connect your computer to a heterogeneous network, you can count on a variety of interpretations of non-alphanumeric characters in names. Network conventions on this are surprisingly nonstandard.

Don't expect case to be preserved.

Upper and lowercase characters look the same to a great deal of internet software, often under the assumption that it is doing you a favor. It may seem appropriate to capitalize a name the same way you might do it in English, but convention dictates that computer names appear all lowercase. (And it saves holding down the shift key.)

Now that we've heard what not to do, here are some suggestions on names that work well.

Use words/names that are rarely used.

While a word like "typical" or "up" (see above) isn't computer jargon, it is just too likely to arise in discussion and throw off one's concentration while determining the correct referent. Instead, use words like "lurch" or "squire" which are unlikely

Libes [Page 5]

RFC 1178 Name Your Computer August 1990

to cause any confusion.

You might feel it is safe to use the name "jose" just because no one is named that in your group, but you will have a problem if you should happen to hire Jose. A name like "sphinx" will be less likely to conflict with new hires.

Use theme names.

Naming groups of machines in a common way is very popular, and enhances communality while displaying depth of knowledge as well as imagination. A simple example is to use colors, such as "red" and "blue". Personality can be injected by choices such as "aqua" and "crimson".

Certain sets are finite, such as the seven dwarfs. When you order your first seven computers, keep in mind that you will probably get more next year. Colors will never run out.

Some more suggestions are: mythical places (e.g., Midgard, Styx, Paradise), mythical people (e.g., Procne, Tereus, Zeus), killers (e.g., Cain, Burr, Boleyn), babies (e.g., colt, puppy,

tadpole, elver), collectives (e.g., passel, plague, bevy, covey), elements (e.g., helium, argon, zinc), flowers (e.g., tulip, peony, lilac, arbutus). Get the idea?

Use real words.

Random strings are inappropriate for the same reason that they are so useful for passwords. They are hard to remember. Use real words.

Don't worry about reusing someone else's hostname.

Extremely well-known hostnames such as "sri-nic" and "uunet" should be avoided since they are understood in conversation as absolute addresses even without a domain. In all other cases, the local domain is assumed to qualify single-part hostnames. This is similar to the way phone numbers are qualified by an area code when dialed from another area.

In other words, if you have choosen a reasonable name, you do not have to worry that it has already been used in another domain. The number of hosts in a bottom-level domain is small, so it shouldn't be hard to pick a name unique only to that domain.

Libes [Page 6]

RFC 1178 Name Your Computer August 1990

There is always room for an exception.

I don't think any explanation is needed here. However, let me add that if you later decide to change a name (to something sensible like you should have chosen in the first place), you are going to be amazed at the amount of pain awaiting you. No matter how easy the manuals suggest it is to change a name, you will find that lots of obscure software has rapidly accumulated which refers to that computer using that now-ugly name. It all has to be found and changed. People mailing to you from other sites have to be told. And you will have to remember that names on old backup media labels correspond to different names.

I could go on but it would be easier just to forget this quideline exists.

Conclusion

Most people don't have the opportunity to name more than one or two computers, while site administrators name large numbers of them. By choosing a name wisely, both user and administrator will have an easier time of remembering, discussing and typing the names of their computers.

I have tried to formalize useful guidelines for naming computers, along with plenty of examples to make my points obvious. Having been both a user and site administrator, many of these anecdotes come from real experiences which I have no desire to relive. Hopefully, you will avoid all of the pitfalls I have discussed by choosing your computer's name wisely.

Credits

Thanks to the following people for suggesting some of these guidelines and participating in numerous discussions on computer naming: Ed Barkmeyer, Peter Brown, Chuck Hedrick, Ken Manheimer, and Scott Paisley.

This essay first appeared in the Communications of the ACM, November, 1989, along with a Gary Larson cartoon reprinted with permission of United Press Syndicate. The text is not subject to copyright, since it is work of the National Institute of Standards and Technology. However, the author, CACM, and NIST request that this credit appear with the article whenever it is reprinted.

Libes [Page 7]

RFC 1178 Name Your Computer August 1990

References

[1] Libes, D., "Choosing a Name for Your Computer", Communications of the ACM, Vol. 32, No. 11, Pg. 1289, November 1989.

[2] Mockapetris, P., "Domain Names - Concepts and Facilities", RFC 1034, USC/Information Sciences Institute, November 1987.

Security Considerations

Security issues are not discussed in this memo.

Author's Address

Don Libes Integrated Systems Group National Institute of Standards and Technology Gaithersburg, MD 20899

Phone: (301) 975-3535

EMail: libes@cme.nist.gov

Libes [Page 8]

The Smiley Dictionary

```
Smiley dictionary
               Last update: September 12, 1990
               by Per Goetterup (ballerup@freja.diku.dk)
From: maart@cs.vu.nl (Maarten Litmaath)
       Wow!
                                       Real unhappy
:-0
                                :-C
:-|
      Grim
                                       Just totally unbelieving
                               :-C
      Baboon
                                       Drooling
:= |
                               :-B
       Speaking
                                       Smirk
                               :-,
:-V
:-V
      Shout
                               :-||
                                       Anger
      Speak with forked tongue
:-W
                               :-)
                                       Smiling
      Sticking tongue out
                               :-(
                                       Frowning
:-٢
                               '-)
:-*
      Oops!
                                       Wink
:-T
      Keeping a straight face ;-)
                                       Sardonic Incredulity
:-D
      Said with a smile
                               %-<I>
                                       Drunk with laughter
      Kiss kiss
                               :-"
                                       Pursing lips
:-X
:-[
      Pouting
                                       My lips are sealed
                               :-#
:-X
      A big wet kiss!
                                       Tongue hanging out in anticipation
                               :-P
:-Y
      A quiet aside
                      8-|
                                       Eyes wide with surprise
      Absolutely livid!!
                               8-|
                                      Tearful
>-<
       "Good Grief!" (Charlie Brown?)
|-{
       "Thish wine tashted pretty good"
:-}
8-1
       "wow, maaan"
       "Omigod!!" (done after "rm -rf *" ?)
8-0
```

```
"Hmmmm."
 :-,
        "Someone just busted my nose".
 |~(
        "Great! I like it!"
 :^D
 B-D
         "Serves you right, dummy!!"
IBM SHARE/Northeast Regional Data Center, Gainsville, Florida/Update, May 1985
The Unofficial Smiley Dictionary
      Your basic smiley. This smilie is used to inflect a sarcastic or
      joking statement since we can't hear voice inflection over Unix.
      Winky smiley. User just made a flirtatious and/or sarcastic remark.
;-)
      More of a "don't hit me for what I just said" smiley.
:-(
      Frowning smiley. User did not like that last statement or is upset
      or depressed about something.
      Indifferent smiley. Better than a Frowning smilie but not quite as
:-I
      good as a happy smiley
      User just made a really biting sarcastic remark. Worse than a :-).
:->
>:-> User just made a really devilish remark.
>;-> Winky and devil combined. A very lewd remark was just made.
Those are the basic ones...Here are some somewhat less common ones:
(-:
      User is left handed
%-)
      User has been staring at a green screen for 15 hours straight
:*)
    User is drunk
[:] User is a robot
8-) User is wearing sunglasses
B:-) Sunglasses on head
::-) User wears normal glasses
B-) User wears horn-rimmed glasses
8:-) User is a little girl
:-)-8 User is a Big girl
:-{) User has a mustache
:-{} User wears lipstick
{:-) User wears a toupee
}:-( Toupee in an updraft
:-[
     User is a Vampire
      Bucktoothed vampire
:-E
:-F
      Bucktoothed vampire with one tooth missing
:-7
      User just made a wry statement
:-*
    User just ate something sour
;-( User is crying
;-) User is so happy, s/he is crying
     User is screaming
:-0
```

```
:-#
      User wears braces
:^)
     User has a broken nose
:<)
     User is from an Ivy League School
:-8
     User is tongue tied.
+-:-) User is the Pope or holds some other religious office
`:-) User shaved one of his eyebrows off this morning
,:-) Same thing...other side
|-I User is asleep
|-0 User is yawning/snoring
:-Q
     User is a smoker
:-? User smokes a pipe
0-)
    Megaton Man On Patrol! (or else, user is a scuba diver)
0 :-) User is an angel (at heart, at least)
:-P
     Nyahhhh!
:-S
     User just made an incoherent statement
:-D User is laughing (at you!)
:-X User's lips are sealed
:-C User is really bummed
<|-) User is Chinese
<|-( User is Chinese and doesn't like these kind of jokes
:-/ User is skeptical
C=:-) User is a chef
   User is pro-nuclear war
*<:-) User is wearing a Santa Claus Hat
:-o Uh oh!
(8-o It's Mr. Bill!
*:o) And Bozo the Clown!
3:] Pet smiley
3:[ Mean Pet smiley
d8= Your pet beaver is wearing goggles and a hard hat.
E-:-) User is a Ham radio operator
:-9 User is licking his/her lips
%-6 User is braindead
[:-) User is wearing a walkman
(:I User is an egghead
<:-I User is a dunce
K:P User is a little kid with a propeller beenie
@:-) User is wearing a turban
:-0 No Yelling! (Quiet Lab)
:-: Mutant Smiley
     The invisible smiley
.-) User only has one eye
     Ditto...but he's winking
,-)
X-( User just died
C=}>;*{0) Mega-Smiley... A drunk, devilish chef with a toupee in an updraft,
                         a mustache, and a double chin
Note: A lot of these can be typed without noses to make midget smileys.
:] - Gleep...a friendly midget smiley who will gladly be your friend
:) - Happy
```

```
:> - hmm, let me think...
:D - Laughter
:I - Hmmm, not funny!
:( - Sad
:[ - Real Downer
:< - what pretences!
:{ - oh boy, the headmaster!...
:0 - Yelling
;( - Crying
[] - Hugs and
:* - Kisses
  :-`
       smiley spitting out its chewing tobacco
  :-1
       smiley bland face
  : -!
  :-$
       smiley face with it's mouth wired shut
  :-6
       smiley after eating something sour
 8-)
       smiley swimmer
  :-*
       smiley after eating something bitter
  :-&
       smiley which is tongue-tied
  :-0
       smiley orator
 (:-( unsmiley frowning
 =:-) smiley punk-rocker
 =:-( (real punk rockers don't smile)
 +-:-) smiley priest
  :-o smiley singing national anthem
       smiley sticking its tongue out (at you!)
  :-p
  :-[
       un-smiley blockhead
  :- ] smiley blockhead
  :-{
       smiley variation on a theme
  :-}
       ditto
 {:-) smiley with its hair parted in the middle
 }:-) above in an updraft
 g-) smiley with pince-nez glasses
  :-\
       undecided smiley
       lefty undecided smiley
  :-/
  :-|
       "have an ordinary day" smiley
  ;-)
      winking smiley
  :-<
       real sad smiley
      "my lips are sealed" smiley
  :-X
       bummed out smiley
  :-C
  :-v talking head smiley
  :-?
       smilely smoking a pipe
 0-)
       smiley cyclops (scuba diver?)
  :< midget unsmiley</pre>
  :> midget smiley
:-) ha ha
                   ~~:-(
                           net.flame
|-) hee hee
|-D ho ho
```

```
:-> hey hey
                   X-( net.suicide
:-( boo hoo
:-I hmm
                   >:-I net.startrek
:-0 uh oh
:-P nyah nyah
                   3:o[ net.pets
|-P yuk
Male :-
Female >-
Infinity 8
- And the (IMHO) All Time Classic:
   %\v
           Picasso
From: Charles Guest News Administrator newsadm@pioneer.arc.nasa.gov
August 13, 1989
A pig:
   :0)
A leper:
  : )
Jimmy Durante:
   :###)
Donald Trump:
   :$)
Carl Friedrich Gauss
   :+)
Peter Ubberoth:
   :~)
Jose Feliciano:
   -)
Helen Keller:
Dolly Parton:
   :-) 8
John Holmes:
   :-) ---
Bon Jovi:
      ###
      #:-)
      ###
Ed Koch:
      #
      :-)
Bozo the Clown:
      ###
```

```
:0)
      ###
Siamese twins:
   (-::-)
An accountant:
   :%)
Sam Kinnison:
 :-)!!!
Wilt Chamberlin:
 :-)
Willie Shoemaker:
      :-)
a schizophrenic:
   *!#*!^*&:-)
a manic depressive:
   :-) ... :-( ... :-) ... :-( ....
Adolph Hitler:
   :-=)
Arnold Schwarznegger:
  :-)==
98-pound weakling:
   :-)--
Sammy Davis, Jr.:
   . - )
an innie (belly button):
  :-)
an outie:
  :-) ,
a slut:
  :-) <
a celibate:
  :-) >
a nymphomaniac:
  :-) < ... :-) < ... :-) < ....
Lesbians:
   :-Q <
         >
               Q-:
A philosopher:
   :?)
John Q. Public:
  :0)
Everyman:
   :*)
The Unofficial Smilie Dictionary
:-) Your basic smilie. This smilie is used to inflect a sarcastic or
     joking statement since we can't hear voice inflection over Unix.
     Winky smilie. User just made a flirtatious and/or sarcastic remark.
```

More of a "don't hit me for what I just said" smilie. :-(Frowning smilie. User did not like that last statement or is upset or depressed about something. Indifferent smilie. Better than a Frowning smilie but not quite as :-I good as a happy smilie User just made a really biting sarcastic remark. Worse than a :-). >:-> User just made a really devilish remark. >;-> Winky and devil combined. A very lewd remark was just made. Those are the basic ones...Here are some somewhat less common ones: User is left handed (-: %-) User has been staring at a green screen for 15 hours straight :*) User is drunk [:] User is a robot 8-) User is wearing sunglasses B:-) Sunglasses on head ::-) User wears normal glasses B-) User wears horn-rimmed glasses 8:-) User is a little girl :-)-8 User is a Big girl :-{) User has a mustache :-{} User wears lipstick {:-) User wears a toupee }:-(Toupee in an updraft :-[User is a Vampire :-E Bucktoothed vampire

Bucktoothed vampire with one tooth missing

User juust made a wry statement

:-F

:-7

375

```
:-*
     User just ate something sour
:-)~ User drools
:-~) User has a cold
:'-( User is crying
:'-) User is so happy, s/he is crying
     User is screaming
:-0
     User wears braces
     User has a broken nose
:^)
    User has a broken nose, but it's the other way
:v)
    User's nose is sliding off of his face
:_)
:<) User is from an Ivy League School
:-& User is tongue tied.
=:-) User is a hosehead
-:-) User is a punk rocker
-:-( (real punk rockers don't smile)
:=) User has two noses
+-:-) User is the Pope or holds some other religious office
`:-) User shaved one of his eyebrows off this morning
,:-) Same thing...other side
|-I User is asleep
     User is yawning/snoring
|-0
:-Q
    User is a smoker
:-? User smokes a pipe
0-)
     Megaton Man On Patrol! (or else, user is a scuba diver)
0 :-) User is an angel (at heart, at least)
```

```
:-P
      Nyahhhh!
:-S
      User just made an incoherent statement
:-D
     User is laughing (at you!)
     User's lips are sealed
:-X
:-C User is really bummed
<|-) User is Chinese
<|-( User is Chinese and doesn't like these kind of jokes
:-/ User is skeptical
C=:-) User is a chef
     User is pro-nuclear war
*<:-) User is wearing a Santa Claus Hat
:-0
     Uh oh!
(8-o It's Mr. Bill!
*:o) And Bozo the Clown!
3:1 Pet smilie
3:[ Mean Pet smilie
d8= Your pet beaver is wearing goggles and a hard hat.
E-:-) User is a Ham radio operator
     User is licking his/her lips
:-9
%-6 User is braindead
[:-) User is wearing a walkman
(:I User is an egghead
<:-I User is a dunce
K:P
     User is a little kid with a propeller beenie
@:-) User is wearing a turban
:-0
      No Yelling! (Quiet Lab)
```

```
:-:
      Mutant Smilie
      The invisible smilie
.-) User only has one eye
,-)
     Ditto...but he's winking
X-( User just died
8 :-) User is a wizard
C=}>;*{)) Mega-Smilie... A drunk, devilish chef with a toupee in an updraft,
                          a mustache, and a double chin
Note: A lot of these can be typed without noses to make midget smilies.
:) Midget smilie
:] Gleep...a friendly midget smilie who will gladly be your friend
=) Variation on a theme...
:} - What should we call these? (what?)
:) - Happy
:> - what?
:@ - what?
:D - Laughter
:I - Hmmm...
:( - Sad
:[ - Real Downer
:< - what?
:{ - what?
:0 - Yelling
:C - what?
:Q - what?
:,( - Crying
```

```
[] - Hugs and
:* - Kisses
|I - Asleep
\^o -Snoring
  :-'
       smiley spitting out its chewing tobacco
  :-1
       smiley bland face
 :-!
 :-@
       smiley face screaming
  :-#|
       smiley face with bushy mustache
 :-$
       smiley face with it's mouth wired shut
 :-%
        smiley banker
       smiley after eating something sour
  :-6
  :^)
       smiley with pointy nose (righty)
        smiley after a wry statement
 :-7
 8-)
       smiley swimmer
 :-*
       smiley after eating something bitter
  :-8
       smiley which is tongue-tied
       smiley orator
 :-0
   smiley invisible man
 (:-( unsmiley frowning
 (:-) smiley big-face
 ):-)
 ):-( unsmiley big-face
 )8-) scuba smiley big-face
 =:-) smiley punk-rocker
```

```
=:-( (real punk rockers don't smile)
     smiley priest
+:-)
      smiley trying to touch its tongue to its nose
:-q
     disappointed smiley
:-e
     cross smiley
:-t
     semi-smiley
:-i
     smiley singing national anthem
:-0
      smiley sticking its tongue out (at you!)
:-p
     un-smiley blockhead
:-[
     smiley blockhead
:-]
     smiley variation on a theme
:-{
:-}
     ditto
{:-)
     smiley with its hair parted in the middle
}:-) above in an updraft
:-a
     lefty smilely touching tongue to nose
     smiley after a BIZARRE comment
:-S
     lefty smiley razzing you
:-d
     smiley with ponce-nez glasses
g-)
     left smiling smilely
:-j
     beats me, looks like something, tho.
:-k
:-1
    y.a.s.
     mutant smiley
:-:
:-\
     undecided smiley
      "have an ordinary day" smiley
:-|
     winking smiley
;-)
```

```
:-<
        real sad smiley
  :->
        y.a.s.
  :-Z
       y.a.c.s.
       "my lips are sealed" smiley
  :-X
       bummed out smiley
 :-C
       talking head smiley
  :-V
       left-pointing nose smiley
  :v)
 :-b
       left-pointing tongue smiley
 :-/
       lefty undecided smiley
  :-?
       smilely smoking a pipe
  .-]
       one-eyed smilely
  ,-}
       wry and winking
 0-)
       smiley cyclops (scuba diver?)
  :-=) older smiley with mustache
  :u)
       smiley with funny-looking left nose
 :n)
       smiley with funny-looking right nose
 :< midget unsmiley</pre>
 :> midget smiley
 }:^#}) mega-smiley: updrafted bushy-mustached pointy nosed smiley with
           a double-chin
:-) ha ha
                  ~~:-(
                          net.flame
                  0 |-) net.religion
|-) hee hee
|-D ho ho
               8 :-I net.unix-wizards
:-> hey hey
:-( boo hoo
              X-(
                           net.suicide
               E-:-I net.ham-radio
:-I hmm
```

```
:-O uh oh >:-I net.startrek
:-P nyah nyah
               3:o[ net.pets
|-P yuk
:-} beard
:-{ mustache
:-# braces
:-X bow tie
:-Q smoker
<:I dunce
(:I egghead
@:I turban
8-) glasses
B-) horn-rims
8:-) glasses on forehead
:-8( condescending stare
;-) wink
>:-< mad
Drama :- ( Comedy :-) Surpise :-o Suspense 8-|
Male :- Female >-
Birth |-0 Death 8-#
```

Usenet Book Sources

From: eps@toaster.SFSU.EDU (Eric P. Scott) Newsgroups: news.newusers.questions Subject: Re: The Qustion Message-ID: <813@toaster.SFSU.EDU> Date: 26 Jul 90 22:44:51 GMT References: <aaTwm1w162w@questor.wimsey.bc.ca> Reply-To: eps@cs.SFSU.EDU (Eric P. Scott) Organization: San Francisco State University Lines: 28 In article <aaTwm1w162w@questor.wimsey.bc.ca> adam@questor.wimsey.bc.ca (Adam Smith) writes: >What I'm after is a source of information on USENET in general. A book, a >part in a book, a magazine, a file someone would care to send to me, >anything. O'Reilly & Associates publishes two relevant books in their "Nutshell" series; you probably want the first one. List Price Using UUCP and USENET US\$21.95 Managing UUCP and USENET US\$24.95 You should be able to find these at technical bookstores, or you can order from uunet--send e-mail to uunet!orders for current prices and ordering information. O'Reilly and Associates, Inc. 90 Sherman Street Cambridge, MA 02140 USA +1 617 354 5800 can probably tell you who distributes their books in your area. ambar@ora.com uunet!ora!ambar O'Reilly & Associates, Inc. Publishers of Nutshell Handbooks

90 Sherman Street, Cambridge, MA 02140; 617-354-5800 Book Orders => 632 Petaluma Ave, Sebastopol, CA 95472

800-338-NUTS (in CA 800-533-NUTS) FAX 707-829-0104

How to Use USENET Effectively, Supplement to files A - S

How to Use USENET Effectively

Matt Bishop
Research Institute for Advanced Computer Science
Mail Stop 230-5
NASA Ames Research Center
Moffett Field, CA 94035

1. Introduction

USENET is a worldwide bulletin board system in which thousands of computers pass articles back and forth. Of necessity, customs have sprung up enabling very diverse people and groups to communicate peaceably and effectively using USENET. These customs are for the most part written, but are scattered over several documents that can be difficult to find; in any case, even if a new user can find all the documents, he most likely will have neither the time nor the inclination to read them all. This document is intended to collect all these conventions into one place, thereby making it easy for new users to learn about the world of USENET. (Old-timers, too, will benefit from reading this.)

You should read this document and understand it thoroughly before you even think about posting anything. If you have questions, please ask your USENET administrator (who can usually be reached by sending mail to usenet) or a more knowledgeable USENET user. Believe me, you will save yourself a lot of grief.

The mechanics of posting an article to USENET are explained in Mark Horton's excellent paper How to Read the Network News; if you have not read that yet, stop here and do so. A lot of what follows depends on your knowing (at least vaguely) the mechanics of posting news.

Before we discuss these customs, we ought to look at the history of USENET, what it is today, and why we need these conventions.

2. All About USENET

USENET began on a set of computers in North Carolina's

Research Triangle. The programs involved (known as "netnews" then, and "A news" now) exchanged messages; it was a small, multi-computer bulletin board system. As time passed, administrators of other systems began to connect their computers to this bulletin board system. The network grew. Then, at Berkeley, the

How to Use USENET Effectively

1

How to Use USENET Effectively

2

news programs were rewritten (this version became known as "B news") and the format changed to conform to ARPA standards (again, this became the "B protocol for news".*) This version of news was very widely distributed, and at this point USENET began to take on its current shape.

USENET is a logical network (as opposed to a physical network.) It is also a very amorphous network, in that there is no central administration or controlling site. There is not even an official list of members, although there is a very complete unofficial one. A site gets access to USENET by finding some other site already on USENET that it can connect to and exchange news articles. So long as this second site (called a neighbor of the first site) remains willing and able to pass articles to and from the first site, the first site is on USENET. A site leaves the USENET only when no one is willing or able to pass articles to, or accept articles from, it.

As a result, USENET has no equivalent of a "sysop" or central authority controlling the bulletin board. What little control is exercised is wielded by the person at each site who is responsible for maintaining the USENET connections (this person is called the "USENET administrator.") Because most USENET administrators are (relatively) new to USENET, and because administering USENET locally involves a great deal of work, most USENET administrators tend to follow the lead of other, more experienced, administrators (often known somewhat irreverently as "net gurus.") This is not an abdication of responsibility, but a means of keeping the amount of work little enough so it can be done without interfering with the local USENET administrator's job. An example of this is the list of currently active newsgroups circulated every month or so. It is not "official" - no one has that authority - but as the maintainer is doing the work that every other USENET administrator would have to do otherwise, it is accepted as a valid list. If the maintainer changes the list in a way another USENET administrator finds unacceptable, that administrator can simply ignore the list. (Incidentally, the "net gurus" became known as such because of the work they have contributed to USENET. Their experience is a valuable resource for each USENET administrator.)

Because the USENET has grown so wildly, a number of problems have appeared. One of these problems is technical, and a number of the conventions this document describes spring from attempts to keep this problem under control.

The technical problem arises due to the transport mechanism used by most USENET sites. Most computers on USENET do not have access to large-area networks like ARPANET. As a result the only

News Version B 2.11

October 19, 1986

How to Use USENET Effectively

3

viable transport mechanism these sites can use is a set of programs collectively known as UUCP and which communicate over dial-up telephone lines. Initially, news programs generated one UUCP command per article. With the explosion of the USENET, the number of articles simply swamped many sites; phone lines would be tied up all day transmitting news, and many articles would be processed at the same time, slowing down the computers noticeably.

The solution was to batch messages. This way, many articles are sent via UUCP with one command, and the command on the receiving machine would split the file into separate articles, which could then be processed individually. While this increased the size of the files being sent, it cut down on the number of UUCP commands sent, and since sending a command involves quite a bit of overhead, this decreased the duration of phone calls, and to a lesser degree the load on the computer. At some sites, such as Purdue, this was not quite enough, so a simple spooler was implemented to process the individual articles one at a time. This reduced the system load to a very acceptable amount.

^{*} See Standard for Interchange of USENET Messages for a description of the two formats.

However, the problem has not gone away by any means. In one sense it has become worse; as more articles are posted to the network, phone costs and system loads averages increase, and system administrators require USENET administrators to cut back or eliminate newsgroups and to transmit news only at night (which means long propagation delays). In short, everyone who has anything to do with administering any USENET site is very concerned about the future of USENET, both in general and at his own site.

Many of the rules you will read address this concern. The fear that USENET may collapse is not a bogeyman, but very real. We hope it will not collapse, and the rules below outline some ways to prevent problems and increase the likelihood that enough sites will remain on USENET to keep it alive. There is no central authority that can force you to follow them, but by doing so you will help keep USENET a valuable resource to the computer community.

3. Deciding to Post

Before you decide to post an article, you should consider a few things.

3.1. Do not repeat postings

This applies even if you did not post the information the first time around. If you know the answer to a question someone asked, first read the follow-ups, and if you have something more to contribute, mail it to the questioner; if you think it should be seen by others, ask the questioner to summarize the answers he receives in a subsequent article. One of the biggest problems on USENET is that many copies of the same answer to a simple question are posted.

News Version B 2.11

October 19, 1986

How to Use USENET Effectively

4

If you want to repost something because you believe it did not get to other USENET sites due to transmission problems (this happens sometimes, but a lot less often than commonly believed), do some checking before you repost. If you have a friend at another USENET site, call him and ask if the article made it to his site. Ask your USENET administrator if he knows of any problems in the USENET; there are special newsgroups to which USENET

administrators subscribe in which problems are reported, or he can contact his counterparts at other sites for information. Finally, if you decide you must repost it, indicate in the article subject that it is a reposting, and say why you are reposting it (if you don't, you'll undoubtedly get some very nasty mail.)

Reposting announcements of products or services is flatly forbidden. Doing so may convince other sites to turn off your USENET access.

When school starts, hoards of new users descend upon the USENET asking questions. Many of these questions have been asked, and answered, literally thousands of times since USENET began. The most common of these questions, and their answers, have been collected in the hope that the new users will read them and not re-post the same questions. So, if you want to ask a question, check Appendix A (Answers to Frequently Asked Questions) to be sure it isn't one that has been asked and answered literally hundreds of times before you started reading the USENET.

3.2. Do not post anything when upset, angry, or intoxicated

Posting an article is a lot like driving a car - you have to be in control of yourself. Postings which begin "Jane, you ignorant slut, ..." are very definitely considered in poor taste*. Unfortunately, they are also far too common.

The psychology of this is interesting. One popular belief is that since we interact with USENET via computers, we all often forget that a computer did not do the posting; a human did. A contributing factor is that you don't have to look the target of abuse in the eye when you post an abusive message; eye-to-eye contact has an amazing effect on inhibiting obnoxious behavior. As a result, discussions on the USENET often degenerate into a catfight far more readily than would a face-to-face discussion.

Before you post an article, think a minute; decide whether or not you are upset, angry, or high. If you are, wait until you calm down (or come down) before deciding to post something. Then think about whether or not you really want to post it. You will be amazed what waiting a day or even a few hours can do for your perspective.

News Version B 2.11

October 19, 1986

^{*} Unless you are critiquing Saturday Night Live.

Bear in mind that shouting hasn't convinced anyone of anything since the days of Charlemagne, and being abusive makes people hold even more tenaciously to their ideas or opinions. tleness, courtesy, and eloquence are far more persuasive; not only do they indicate you have enough confidence in your words to allow them to speak for you, but also they indicate a respect for your audience. This in turn makes it easier for your audience to like or respect you - and people tend to be far more interested in, and receptive to, arguments advanced by those they like or respect than by writers who are abusive. Finally, remember that some discussions or situations simply cannot be resolved. cause people are different, agreed-upon facts often lead to wildly different feelings and conclusions. These differences are what makes life so wonderful; were we all alike, the world would be a very boring place. So, don't get frantic; relax and enjoy the discussion. Who knows, you might even learn something!

3.3. Be sure your posting is appropriate to USENET

Some things are inappropriate to post to USENET. Discussing whether or not some other discussion is appropriate, or if it is in the right newsgroup, is an example. Invariably, the "meta-discussion" generates so many articles that the discussion is simply overwhelmed and vanishes; but the meta-discussion lingers on for several weeks, driving most of the readers of that newsgroup out of their collective minds. Help preserve the sanity of your fellow USENET readers by mailing such comments to the people involved, rather than posting them.

Another example of inappropriate postings is the infamous "spelling flame." Every few months someone takes another poster to task for poor spelling or grammar. Soon, everyone jumps on the bandwagon, tearing apart one another's postings for such errors. To put it mildly, this angers almost everyone involved for no real reason. Please remember that we all make mistakes, and there are a lot of people for whom English is a second language. So, try to keep your spelling and grammar comments to yourself but if you find you simply cannot, mail them to the poster rather than posting them.

Far more insidious are requests similar to "How can I splice into the local cable TV transmission line?" Posting to USENET is akin to publishing, so don't ask for or post instructions on how to do something illegal. And please don't quote the First Amend-

ment, or the laws allowing freedom of speech in your country; while the posting programs will not stop you, the aftermath could be very unpleasant - lawsuits and court trials usually are, and the USENET would certainly collapse as sites dropped from it to protect themselves from legal liability. You wouldn't want that on your conscience, would you? Of course not.

Related to this is the next rule.

News Version B 2.11

October 19, 1986

How to Use USENET Effectively

6

3.4. Do not post other people's work without permission

Posting something to USENET puts it in the public domain for all practical purposes. So, be careful about posting things like UNIX*-related material (specifically source code) or company documents; consider licensing and nondisclosure agreements first. Some people regard the posting of "diffs" based on licensed code to be a suitable compromise, as they are only useful to those who have the base code already.

Copyrighted works are a separate problem. Both United States and international law provide protection for copyrighted works; other than short extracts for purposes of criticism, you cannot copy a copyrighted work in whole or in part without permission of the copyright holder (who may, or may not, be the author.) Without this protection, artists could not make any money and hence would have limited incentive to make the fruits of their art available at all. Posting a copyrighted work without permission is theft, even though the property stolen is not tangible in most cases. Hence, posting movie and book reviews, song lyrics, or anything else which is copyrighted without the permission of the copyright holder, could cause you personally, your company, or the USENET itself to be held liable for damages. Please be very careful that you obey the law when posting such material!

3.5. Don't forget that opinions are those of the poster and not his employer.

Every so often, someone will post a particularly disgusting

article, and a number of responses will ask if all employees of the original poster's company share his (revolting) opinion, or suggest that action be taken against that company. Please remember that all opinions or statements in articles are to be attributed to the poster only, and in particular, do not necessarily represent the opinions of the poster's employer, the owner of the computer on which the article originated, or anyone involved with any aspect of USENET - and consequently the responsibility for any USENET message rests with the poster and with no one else. The appropriate response is not to attack the company or its other employees; let the poster know what you think of his posting via mail. If the postings continue, take advantage of the news software's presenting you with the author's name and the subject line and then asking if you want to see the article; start looking for the poster's name or the offensive subject in the articles presented to you and skip them. If you really get offended, you can unsubscribe from a newsgroup.

Part of the price of freedom is allowing others to make fools of themselves. You wouldn't like to be censored, so don't advocate censorship of others. No one is forcing you to read the

*UNIX is a registered trademark of AT&T.

News Version B 2.11

October 19, 1986

How to Use USENET Effectively

7

postings.

In some countries, posting or receiving certain types of articles may be a criminal offense. As a result, certain newsgroups which circulate freely within the United States may not be circulated in other nations without risking civil or criminal liabilities. In this case, the appropriate action for sites in that country is neither to accept nor to transmit the newsgroup. No site is ever forced to accept or pass on any newsgroup.

4. Where to Post

The various newsgroups and distributions have various rules associated with their use. This section will describe these rules and offer suggestions on which newsgroups to post your message.

4.1. Keep the distribution as limited as possible

A basic principle of posting is to keep the distribution of your article as limited as possible. Like our modern society, USENET is suffering from both an information glut and information pollution. It is widely believed that the USENET will cease to function unless we are able to cut down the quantity of articles. One step in this direction is not to post something to places where it will be worthless. For example, if you live in Hackensack, New Jersey, the probability of anyone in Korea wanting to buy your 1972 Toyota is about as close to zero as you can get. So confine your posting to the New Jersey area.

To do this, you can either post to a local group, or post to a net-wide group and use the distribution feature to limit how widely your article will go. When you give your posting program (usually postnews(1)) a distribution, you are (in essence) saying that machines which do not recognize that distribution should not get the article. (Think of it as a subgroup based on locality and you'll get the idea.) For example, if you are posting in the San Francisco Bay Area, and you post your article to rec.auto but give ba as the distribution, the article will not be sent beyond the San Francisco Bay Area (to which the ba distribution is local) even though you put it in a net-wide newsgroup. Had you given the distribution as ca (the California distribution), your article would have been sent to all Californian sites on USENET. Had you given the distribution as world, your article would have been sent to all sites on USENET.

4.2. Do not post the same article twice to different groups

If you have an article that you want to post to more than one group, post to both at the same time. Newer versions of the news software will show an article only once regardless of how many newsgroups it appears in. But if you post it once to each different group, all versions of news software will show it once for each newsgroup. This angers a lot of people and wastes

News Version B 2.11

October 19, 1986

How to Use USENET Effectively

8

everybody's time.

4.3. Do not post to moderated newsgroups.

You may not post directly to certain newsgroups; you cannot post to some at all. Newer versions of the news software will inform you when either of these restrictions apply, but older versions of news software will not.

If you want to have the appropriate moderator post something, mail it to the moderator. (If you do not know the address, ask your USENET administrator. In some cases, the software will automatically mail, rather than post, your article to the moderator.)

4.4. Ask someone if you can't figure out where to post your article

If you cannot figure out where to post something, look in news.announce.newusers for the list of active newsgroups. (This is posted biweekly. If you can't find it, look at the list in How to Read the Network News; but be aware that list is undoubtedly out of date already.) If your article does not seem to fit in any of the listed groups, post it to misc.misc or don't post it.

If you still are not sure which newsgroup to post your article to, ask an old-timer. If your site doesn't have any old-timers (or none of the old-timers will admit to being old-timers), contact any of the following people:

Gene Spafford (spaf@gatech.CSNET, spaf@gatech.UUCP)
Mark Horton (mark@cbosgd.UUCP)
Rick Adams (rick@seismo.CSS.GOV, rick@seismo.UUCP)
Chuq Von Rospach (chuq@sun.UUCP)
Matt Bishop (mab@riacs.ARPA, mab@riacs.UUCP)

We will be happy to help you. But, please, do not post the article to the net before you ask us!

4.5. Be sure there is a consensus before creating a new newsgroup

Creating a new newsgroup is, in general, a very bad idea. Currently, there are so many articles being posted that the USENET is in danger of collapse as site after site decides to cease to accept and retransmit certain newsgroups. Moreover, there is no established procedure for deleting a newsgroup, so once created, newsgroups tend to stay around. They also tend to encourage people to think up new newsgroups, and the cycle repeats. Try to avoid thinking up new newsgroups.

If, however, you believe a new group should be created, be

sure you have a consensus that the group is needed (either a

News Version B 2.11

October 19, 1986

How to Use USENET Effectively

9

mailing list has enough traffic and readers to justify turning it into a newsgroup, or a discussion in a current newsgroup becomes so large for a period of time long enough to warrant splitting it into a newsgroup.) Then post an article to news.group as well as any other groups related to your proposed new group, and discuss the topics you are proposing be covered in your new group, what it should be called, whether it is really needed, and so forth. Try to resolve all objections, and take into account all suggestions and comments; finally, have everyone mail you a "yes" or "no" vote on whether the group should be created. Try to get at least 40 or 50 "yes" votes before creating the group; if you want to be safe, get around 100.

4.6. Watch out for newsgroups which have special rules about posting

Some newsgroups have special rules. This section summarizes them.

rec.arts.books

Do not post anything revealing a plot or a plot twist without putting the word "spoiler" somewhere in the "Subject" field. This will let those who do not wish to have a surprise spoiled skip the article.

rec.humor

If you want to post an offensive joke (this includes racial, religious, sexual, and scatological humor, among other kinds) rotate it. (If you do not know what this means, look in the section Writing Your Posting.)

rec.arts.movies

Do not post anything revealing a plot or a plot twist without putting the word "spoiler" in the "Subject" field. This will let those who do not wish to have a surprise spoiled skip the article.

news.group

Discussions about whether or not to create new groups, and what to name them, go here.

Please mail your votes to the proposer; don't

post them.

comp.sources Source code postings go here. Discussions

are not allowed. Do not post bug fixes here.

comp.sources.bugs Bug reports and bug fixes to sources posted

in comp.sources go here.

comp.sources.wanted Requests for sources go here.

the body of the message, say what you are

testing.

News Version B 2.11

October 19, 1986

How to Use USENET Effectively

10

misc.wanted Requests for things other than source code go

here. Please use the smallest distribution

possible. Post offers here, too.

5. Writing the Article

Here are some suggestions to help you communicate effectively with others on the USENET. Perhaps the best advice is not to be afraid to consult a book on writing style; two of the best are How to Write for the World of Work by Cunningham and Pearsall, and Elements of Style by Strunk and White.

5.1. Write for your audience

USENET is an international network, and any article you post will be very widely read. Even more importantly, your future employers may be among the readers! So, try to make a good impression.

A basic principle of all writing is to write at your readers' reading level. It is better to go below than above. Aiming where "their heads ought to be" may be fine if you are a college professor (and a lot of us would dispute even that), but it is guaranteed to cause people to ignore your article. Studies have shown that the average American reads at the fifth grade

level and the average professional reads at the twelfth grade level.

5.2. Be clear and concise

Remember that you are writing for a very busy audience; your readers will not puzzle over your article. So be very clear and very concise. Be precise as well; choose the least ambiguous word you can, taking into account the context in which you are using the word. Split your posting into sections and paragraphs as appropriate. Use a descriptive title in the "Subject" field, and be sure that the title is related to the body of the article. If the title is not related, feel free to change it to a title that is.

5.3. Proofread your article

This is a matter of courtesy; since you want others to read your article, the least you can do is check that it says what you mean in a clear, concise manner. Check for typographical errors, silly grammar errors, and misspellings; if you have a spelling checking program, use it. Also be sure the article is easy to read. Use white space - blanks, tabs, and newlines - and both upper and lower case letters. Do not omit the definite and indefinite articles, either; not only do "a", "an", and "the" make a posting much easier to read, their omission can make a posting ambiguous.

News Version B 2.11

October 19, 1986

How to Use USENET Effectively

11

5.4. Be extra careful with announcements of products or services

When writing a product or service announcement, bear in mind that others will be paying most of the telephone bills. So, if you are announcing several things, combine all the announcements into one article. Mark the posting as a product or service announcement in the title in the "Subject" field. Advertising hyperbole is not appropriate here; remember that your audience is to a large degree technically literate, and your product will stand or fall on its technical merits. Be aware that posting obnoxious or inappropriate advertisements is very serious and if

you do it, you may find your neighbors yanking your USENET access.

5.5. Indicate sarcasm and humor

Remember that people cannot see you when they read your posting; hence, all the subtle nuances of body and facial motion are hidden. It can be quite difficult to tell when you are being sarcastic or humorous. To deal with this problem, the USENET readers and posters have developed a special sign. Mark passages you intend to be taken as humorous with the "smiley face", while looks like this: ":-)". (Think of a head facing you lying on its right side and look again if you don't understand why that symbol was chosen.) As for sarcasm, there is no universal symbol for that (unless the sarcasm is meant humorously, in which case use the smiley face again.) But mark your passage so everyone will realize you are being sarcastic.

5.6. Mark postings which spoil surprises

High on the list of obnoxious messages are those that spoil the plot of a book or movie by giving away an unexpected detail. If you post such an article, please put the word "spoiler" in the "Subject" field of your posting, so people who do not wish to have a surprise ruined can skip the article.

5.7. Rotate offensive postings

If you feel you must post a message that may offend people, you can take steps to be sure the message will only be read by those who explicitly ask for it to be shown to them. The USENET convention is to encrypt these messages by shifting each letter 13 characters, so that (for example) "a" becomes "n". (In more precise terms, this is a Caesar cipher of shift 13; on the USENET, it is called rot13.) When you do this, put the word "rot13" in the "Subject" field. The news reader you are using almost certainly has a command to encrypt and decrypt such messages; if not, use the UNIX command

tr a-zA-Z n-za-mN-ZA-M

News Version B 2.11

October 19, 1986

5.8. The shorter your signature, the better

Keep signatures concise; 2 or 3 lines are usually plenty. Include your name and addresses on any major networks (such as ARPANET, BITNET, or CSNET). This helps people contact you quickly and easily, usually more so than by following the return path of the article. Do not include pictures, graphics or clever quotations that make the signature longer; this is not the appropriate place for them, and many sites resent paying the phone bills for such signatures.

6. Conclusion and Summary

Here is a list of the rules given above:

- => Deciding to post
 - + Do not repeat postings
 - + Do not post anything when upset, angry, or intoxicated
 - + Be sure your posting is appropriate to USENET
 - + Do not post other people's work without permission
 - + Don't forget that opinions are those of the poster and not his company

=> Where to Post

- + Keep the distribution as limited as possible
- + Do not post the same article twice to different groups
- + Do not post to news.announce newsgroups
- + Ask someone if you can't figure out where to post your article
- + Be sure there is a consensus before creating a new newsgroup
- + Watch out for newsgroups which have special rules about posting
- => Writing the Article

- + Write for your audience
- + Be clear and concise

News Version B 2.11

October 19, 1986

How to Use USENET Effectively

13

- + Proofread your article
- + Be extra careful with announcements of products or services
- + Indicate sarcasm and humor
- + Mark postings which spoil surprises
- + Rotate offensive postings
- + The shorter your signature, the better

The USENET can be a great place for us all. Sadly, not enough people are following the customs that have been established to keep the USENET civilized. This document was written to educate all users of the USENET on their responsibilities. Let's clean up the USENET, and turn it into a friendly, helpful community again!

Acknowledgements: The writing of this document was inspired by Chuq von Rospach's posting on USENET etiquette, and it draws on previous work by Mark Horton, A. Jeff Offutt, Gene Spafford, and Chuq von Rospach.

News Version B 2.11

October 19, 1986

How to Use USENET Effectively

14

Appendix A. Answers to Frequently Asked Questions

originally from Jerry Schwarz (jerry@eagle.UUCP) modified by Gene Spafford (spaf@gatech.UUCP) modified by Matt Bishop (mab@riacs.ARPA)

This document discusses some items that occur repeatedly on USENET. They frequently are submitted by new users, and result in many follow-ups, sometimes swamping groups for weeks. The purpose of this note is to head off these annoying events by answering some questions and warning about the inevitable consequence of asking others. If you don't like my answers, let me know and I may include revisions in future versions of this note.

1. What does UNIX stand for?

It is not an acronym, but is a pun on "MULTICS." MULTICS is a large operating system that was being developed shortly before UNIX was created.

2. What is the derivation of "foo" as a filler word?

The favorite story is that it comes from "fubar" which is an acronym for "fouled up beyond all recognition," which is supposed to be a military term. (Various forms of this exist, "fouled" usually being replaced by a stronger word.) "Foo" and "Bar" have the same derivation.

3. Is a machine at "foo" on the net?

These questions belong in news.config if anywhere, but in fact your best bet is usually to phone somebody at "foo" to find out. If you don't know anybody at "foo" you can always try calling and asking for the "computer center." Also, see the newsgroup mod.map, where maps of USENET and the UUCP network are posted regularly.

4. What does "rc" at the end of files like .newsrc mean?

According to Dennis Ritchie, "The name rc comes from RUNCOM, which was the rough equivalent on the MIT CTSS system of what UNIX calls shell scripts. Of course, RUNCOM derives from run commands."

5. What do "- (nf)" and "Orphaned Response" in an item's title mean?

It means that the item was created by "notefiles," an alternative news handling interface that many people prefer. If you want to find out more you can read the Notesfile System Reference Manual" or contact uiucdcs!essick.

News Version B 2.11

October 19, 1986

How to Use USENET Effectively

15

6. What does ":-)" mean?

This is the net convention for a "smiley face." It means that something is being said in jest. If it doesn't look like a smiley face to you, flop your head over to the left and look again.

7. How do I decrypt jokes in rec.humor?

The standard cipher used in rec.humor in called "rot13." Each letter is replaced by the letter 13 further along in the alphabet (cycling around at the end). Most systems have a built in command to decrypt such articles; readnews(1) and vnews(1) have the D command, rn(1) (another popular publicdomain full screen news reader) has the X or <CONTROL-X> commands, notes(1) has % or R. If your system doesn't have a program to encrypt and decrypt these, you can quickly create a shell script using tr(1):

tr A-Za-z N-ZA-Mn-za-m

On some versions of UNIX, the tr command should be written as:

tr "[a-m][n-z][A-M][N-Z]" "[n-z][a-m][N-Z][A-M]"

8. soc.net-people: Is John Doe out there anywhere?

I suspect that these items are people looking for freshman roommates that they haven't seen in ten years. If you have some idea where the person is you are usually better off calling the organization. For example, if you call any Bell Labs location and request John Doe's number. They can give it to you even if he works at a different location.

9. sci.math: Proofs that 1 = 0.

Almost everyone has seen one or more of these in high school. They are almost always based on either division by 0 or taking the square root of a negative number.

10. rec.games: Where can I get the source for empire(6) or rogue(6)?

You can't. The authors of these games, as is their right, have chosen not to make the sources available.

11. comp.unix.wizards: How do I remove files with non-ASCII characters in their names?

You can try to find a pattern that uniquely identifies the file. This sometimes fails because a peculiarity of some shells is that they strip off the high-order bit of characters in command lines. Next, you can try an "rm -i", or "rm

News Version B 2.11

October 19, 1986

-r" (see rm(1).) Finally, you can mess around with i-node numbers and find(1).

12. comp.unix.wizards: There is a bug in the way UNIX handles protection for programs that run setuid.

There are indeed problems with the treatment of protection in setuid programs. When this is brought up, suggestions for changes range from implementing a full capability list arrangement to new kernel calls for allowing more control over when the effective id is used and when the real id is used to control accesses. Sooner or later you can expect this to be improved. For now you just have to live with it.

13. soc.women: What do you think about abortion?

Although abortion might appear to be an appropriate topic for soc.women, more heat than light is generated when it is brought up. Since the newsgroup talk.abortion has been created, all abortion-related discussion should take place there.

14. soc.singles: What do "MOTOS," "MOTSS,", "MOTAS", and "SO" stand for?

Member of the opposite sex, member of the same sex, member of the appropriate sex, and significant other, respectively.

15. How do I use the "Distribution" feature?

When postnews(1) prompts you for a distribution, it's asking how widely distributed you want your article. The set of possible replies is different, depending on where you are, but at Bell Labs in Murray Hill, New Jersey, possibilities include:

local local to this machine
mh Bell Labs, Murray Hill Branch
nj all sites in New Jersey
btl All Bell Labs machines
att All AT&T machines
usa Everywhere in the USA
na Everywhere in North America

If you hit <RETURN>, you'll get the default, which is the first part of the newsgroup name. This default is often not appropriate - please take a moment to think about how far away people are likely to be interested in what you have to say. Used car ads, housing wanted ads, and things for sale other than specialized equipment like computers certainly shouldn't be distributed to Europe and Korea, or even to the next state.

News Version B 2.11

October 19, 1986

How to Use USENET Effectively

17

The newsgroup misc.forsale exists for postings of sale announcements. Its distribution is limited to North America; posters should restrict this distribution even further, if possible and appropriate.

16. Why do some people put funny lines ("bug killers") at the beginning of their articles?

Some earlier versions of news had a bug which would drop the first 512 or 1024 bytes of text of certain articles. The bug was triggered whenever the article started with white space (a blank or a tab). A fix many people adopted was to begin their articles with a line containing a character other than white space. This gradually evolved into the habit of including amusing first lines.

The original bug has since been fixed in newer version of news, and sites running older versions of news have applied a patch to prevent articles from losing text. The "bug-killer" lines are therefore probably no longer needed, but they linger on.

17. What is the address or phone number of the "foo" company?

Try the white and yellow pages of your phone directory, first; a sales representative will surely know, and if you're a potential customer they will be who you're looking for. Phone books for other cities are usually available in libraries of any size. Whoever buys or recommends things for

your company will probably have some buyer's guides or national company directories. Call or visit the reference desk of your library; they have several company and organization directories and many will answer questions like this over the phone. Remember if you only know the city where the company is, you can telephone to find out their full address or a dealer. The network is not a free resource, although it may look like that to some people. It is far better to spend a few minutes of your own time researching an answer rather than broadcast your laziness and/or ineptness to the net.

News Version B 2.11

October 19, 1986