



Technical UNIX User Group

June 1991 \$2.50
Volume 3, Number 9

newsletter of the **Technical UNIX®** **User Group**

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Thoughts From The Editor

By Susan Zuk

This past year has seen many changes for Winnipeg and UNIX. UNIX is finally being accepted and is becoming one of the computer environments of choice. The growing number of phone calls which I have been receiving also proves the growing interest and curiosity.

During the past season, we have continued our meetings with system administration workshops, on-site demonstrations (UNIX usages in the sciences and commercial areas) and of course, discussions on mail and connectivity.

In the last few months there has been much discussion of Usenet and possible ways for our members to obtain access to this facility. In the minutes you can see a way to connect to Usenet for at least the current time. We will see how this works out and if we need our own link.

This newsletter also features an article on e-mail. This discusses how e-mail can be good and detrimental to users. Read about the ways you should interact with your company's e-mail system.

You will be hearing more about a possible UNIX Seminar to be held in the fall. There are tidbits of information in this newsletter (Minutes and President's Corner) so I won't go into details. If you have any suggestions for what you think Winnipegers would like to see or if you would like to become involved with the preparation give me or one of the other executive members a call.

That's all for now, read on for information on our barbecue and instructions on how to get there. It will be a great time!! Bring along your significant other and children.

Group Information

The Technical Unix User Group meets at 7:30 pm the second Tuesday of every month, except July and August. The newsletter is mailed to all paid up members 1 week prior to the meeting. Membership dues are \$20 annually and are due at the October meeting. Membership dues are accepted by mail and dues for new members will be pro-rated accordingly.

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The Executive

President:	Eric Carsted	1-883-2570
Past President:	Gilbert Detillieux	261-9146
Treasurer:	Gilles Detillieux	261-9146
Secretary:	Vacant	
Newsletter Editor:	Susan Zuk	(W) 788-7312
Membership Sec.:	Darren Sampson	(W) 783-4614
Meeting Coordinator	Kirk Marat	(W) 474-6259
Information:	Gilbert Detillieux (or)Susan Zuk	261-9146 (W) 788-7312

ANNOUNCEMENT...

Meeting Location:

June is when TUUG hosts the Annual Barbecue. Please see directions to Eric Carsted's home further on in the newsletter. See you at there.

Please R.S.V.P. with Susan (788-7312) or Gilbert (261-9146) by Friday, June 7th.

Technical UNIX User Group
P.O. Box 130
Saint-Boniface, Manitoba
R2H 3B4

President's Corner

By Eric Carsted

First off, I want to take this opportunity to give my thanks to Grant Sidwall of Hewlett Packard for his presentation of OSF/1. It was both informative and un-biased. An extra thanks goes out to marketing group, for supplying the pizza. That done with, I would like to take this month's President's Corner and focus on the topic of hosting a Unix symposium.

The consensus is that Unix is approaching critical mass in the commercial world. Open Systems and their advantages are being touted as the new paradigm. Unix is the only operating system that fits the definition of Open Systems. I am not going to get into everything that makes up Open Systems, it is fairly well defined in the trade journals and magazines, what I will say though is, that Unix is definitely on its way up. We at the Technical Unix Users Group have a unique opportunity to influence the direction Unix takes in Winnipeg.

I briefly mentioned at the last meeting my idea of hosting a conference or symposium to further Unix in the Winnipeg area. A number of people offered their names, phone numbers, and assistance in planning such an event. A group of people met on Monday, May 27th and further discussed the viability of holding this event. A number of questions and issues were discussed ranging from, "Why do we want to hold it?", "Who is our audience?", "What format should it take?", to setting a rough time schedule. Consensus was reached on a few of these issues. Yes we wish host this event. The objectives of the event are:

1. To increase the awareness and understanding of UNIX in Winnipeg.
2. To increase the awareness of TUUG in Winnipeg.
3. To create excitement amongst our membership and potential members.
4. To establish a relationship with UNIX firms and companies in Winnipeg.

We will be speaking with CIPS to see if this can be a joint venture, and we are going to need a lot of help from the membership in the planning and execution of this event. Once some things have been finalized a letter will be going out to general membership providing more details such as, date, location, list of speakers and topics, and requesting people to come forward and volunteer for the various committees we will need to make this event a success. Your support would be very appreciated.

Please don't forget that our next meeting is our Annual June Barbecue. I am hosting the barbecue this year. Location and details are on the back page. Until then I say goodbye and have a wonderful summer.

The Sociology of Electronic Mail

By Rick Cook

Reprinted from /usr/group CommUNIXations June 1991

As UNIX systems find their way into commercial environments, it is important that those users become as comfortable with electronic mail as the rest of the UNIX community. Many companies are still learning the uses - and abuses - of mail by computer.

Electronic mail is extremely efficient. It speeds up the flow of communications, reduces telephone tag, makes it easy to keep all members of a workgroup instantly informed, and is good for the environment since no paper is involved. On the flip side, it can cause embarrassment, damage corporate careers and even lead to lawsuits.

Electronic mail is a technology so novel that it outpaces social mechanisms for dealing with it. Some problems it generates are still revealing themselves. In the UNIX world, e-mail often becomes a stage for the clash between the informal, technically based culture and the newer, button-down corporate world.

Actually, most of the stumbling blocks aren't technical but social and psychological. As such, they can be made better or worse by the way organizations handle them.

Psychodynamics

Along with other researchers, Sara Kiesler, a professor of social and decision sciences in the Department of Sociology at Carnegie Mellon University in Pittsburgh, has studied e-mail use. Kiesler found that in this medium, hierarchies tend to flatten and decision-making becomes more democratic. As a result of obscured differences in status, users talk more freely. Instead of waiting for the ranking person in the group to lead, as is common in face-to-face meetings, users jump in with their own ideas and opinions. Even shy folks seem more willing to express themselves electronically.

This doesn't necessarily increase productivity. According to the researchers, decisions reached by e-mail tend to be more extreme and the process of arriving at them may take longer than conventional settings. What's more, the lowering of inhibitions through e-mail may produce arguments more readily than in oral discussions.

This is not news to veteran e-mail users who are familiar with the flame, a heated message aimed at someone else. Even people who are normally civil in person can acquire sarcastic and arrogant e-mail personalities. Many examples of this reside on Usenet, where some of the news groups seem to be devoted entirely to tirades. However, instances exist in almost any e-mail system.

The nature of e-mail precipitates flaming. Combining the immediacy of a conversation with the impersonality of a letter, it encourages spontaneity and bluntness. From a

distance, users may not be conscious of the effect they are having on a recipient. It is also difficult to express nuances of emotion through lines of on-screen characters. Lacking the pauses and voice tones of telephone conversation, e-mail makes it easy to offend accidentally or, on the receiving end, to mistake the emotional intent of a message.

The problem of tone is so common and serious that e-mail users have come up with a meta-language of symbols to convey it. They range from simple statements such as grin to typewriter pictures like :-) - the "happy face" laid sideways, to show that something was meant as a joke. Though this seems childish, it can prevent problems and so is spreading among e-mail systems.

Dousing the Flames

Like most e-mail problems, flaming can be mitigated by organization policy. The Carnegie Mellon researchers concluded that anonymity provides oxygen for flaming. Therefore, users who know they can be identified are somewhat less likely to ignite. A first step is to make sure that every e-mail user has his or her own account, rather than sharing one with others.

Because being on the receiving end of such heat is no fun, users generally are willing to support a no-flames policy if it is explicitly slated. If the system doesn't allow anonymous messages or group accounts, violators can be located and counseled.

Another extinguisher for flaming is to establish norms for e-mail courtesy. Making users aware that e-mail tends to exaggerate emotional content can prepare them to turn down the heat. Without being careful, even the most level-headed person can get drawn into a flaming match. The most effective prevention is forethought. If it is made clear that aggression and personal attacks will not be tolerated, most correspondents will think twice before flaring up. It can save embarrassment, too. A lot of cases of flaming look pretty silly a week later, even to their senders.

Reflecting ahead of time is particularly important if the e-mail system doesn't allow for withdrawing messages once they are sent (as most systems don't). This evokes the comic situation of trying to retrieve a letter after depositing it in a postbox - with less chance of success and less humorous consequences.

Sorting Through Junk

Electronic mail takes on characteristics, good and bad, of other types of correspondence. E-mail is an attention-getter in the way a telegram used to be. It is novel enough that most people at least glance at what they get, even executives whose secretaries screen their postal fare. However, one industry leader who no longer reads all his e-mail is Ken Olsen, founder of DEC. According to The Wall Street Journal, Olsen made this decision after printing one day's e-mail message - the printout was 30 feet long.

Junk fax - unsolicited, unwanted fax messages - annoys many people these days but junk e-mail is probably more common and time-consuming because most of us still read our own e-mail. Unlike the fax variety, most junk e-mail isn't advertising. Instead it is irrelevant or useless messages that accumulate in mailboxes. The most common variety consists of copies of messages intended for others.

This situation exists largely because it is so easy to send a document to multiple users via e-mail. Add a name to a distribution list and the copy goes out automatically. Because doing so involves no effort, people tend to add names just in case someone might be interested or leave people on a list because they are too lazy or forgetful to edit it.

Sometimes this takes on a political twist, when opponents engage in a war of memos and copy everyone who might conceivably help them. If the adversaries have different lists, some spectators get only one side of the argument and confusion ensues. There are more insidious variations on this theme, including leaking private memos and leaving a rival off the distribution list for an important notice. The common denominator in most of this office skirmishing is that the people getting copies of the memos are interested only marginally if at all.

The proliferation of e-mail can conceal valuable messages in a pile of junk. If a message's title is unclear or nonexistent, you have read at least part of the message to find out whether it's important. If it doesn't get to the point quickly, you may have to read two or three screens' worth to figure out what is there.

Network Clutter

A related phenomenon is network junk, which consists of files that accumulate because they are interesting or might be useful in the future. This material is the equivalent of excess paper on a desk. You intend to use it someday or just don't know what to do with it.

There is also net graffiti, which people send around because it is funny or otherwise momentarily intriguing. This is the network equivalent of cartoons that get photocopied and faxed all over the country. The files range from silly - such as a multi-megabyte parody of the theme from Gilligan's Island that is making the rounds on West

Coast nets - to socially unacceptable - such as digitized, high resolution pornography. The main problem here is storage space. Although disk space is comparatively cheap these days, it still costs to store megabytes and megabytes of such useless information.

One solution many systems employ is a limit on the amount of storage available to each user. A related measure is to limit the time that mail messages may remain in the "in" box. (Thirty days is a common limit.) Such a mechanism should include a way to retrieve items that exceed the expiration date, to accommodate users who leave important mail on the system too long.

Misdirected Messages

Not being able to retrieve messages once they're sent complicates the common e-mail mistake of sending messages to the wrong address. Most users name their distribution list so they don't have to type in all the addresses for common messages. If the user accidentally sends something to the wrong distribution list, a slew of uninterested people receive it.

Sometimes this can be embarrassing, as suggested by the tale of two coworkers who came into work Monday morning after spending a weekend together. The first thing one of them did was compose a passionate message to the other and e-mail it. Unfortunately he used the wrong command and some 300 of his subordinates ended up reading the love letter.

Good Intentions

Native UNIX e-mail takes advantage of the operating system's scripting facilities. Users who wouldn't dream of doing programming use shell scripts for all sorts of mail processing. However, UNIX shell scripts are notoriously subject to misuse.

For example, an engineer at a major aerospace company wrote a script to reply to e-mail that came when he wasn't around. The script would reply to a message with a canned response saying that he wasn't available. It was a courteous gesture that saved coworkers from waiting for a quick reply. In fact, users in the organization appreciated it so much that they copied it widely.

All was well until a Friday afternoon when Employee A left early to go on vacation and Employee B sent him a message just before departing for the weekend. Employee A's script sent a response to Employee B, which was answered by his script, which produced another answer from Employee A's script and so on until the company's entire e-mail system collapsed.

Occasionally someone sends the e-mail equivalent of a letter bomb. Last Christmas, a major computer manufacturer had to shut down its network to clean out a virus that was being distributed with electronic Christmas cards. Someone in Europe sent a season's greeting that contained a program that read the recipient's mailing list and

forwarded a copy of the "greeting" to everyone on it. In a short while the network was overwhelmed by a viral greetings crossing and recrossing in the mail.

There are also less spectacular ways to waste system resources with e-mail. One of the most common is the automatic cc list, which sends a copy of everything related to a designated subject to everyone on the list. A more efficient option is to provide a central account that all users on the cc list can access to read the messages. Simply limiting the use of the automatic cc lists and educating users to apply them sparingly are other solutions.

Private Property?

One of the differences between regular and electronic mail is that the latter isn't always private. System administrators and others can and do read others' e-mail. Some people who thought their e-mail was as secure as the regular mail have learned painfully that it isn't.

Last year, lawsuits were filed against at least two companies by employees who claim that their superiors read their e-mail and used it against them. Two information systems specialists at Nissan Motor Company claimed that they were shown printouts of their e-mail messages and reprimanded by an executive for using company software for personal purposes. These plaintiffs say they were fired as a result. They claim that they were never told that the system was restored every night and that others could read their mail. The suit calls this an invasion of privacy. Nissan denies that one of the former employees was fired.

A class action was filed in March 1990 against Epson America, in which the plaintiffs again claim that their e-mail was read without their knowledge. One of the key elements in both suits is lack of notice to employees that others can read their mail. Perhaps notifying personnel of this policy would prevent conflict and lawsuits.

Along similar lines, some users don't realize that e-mail is not only sent but stored by the computer system and usually backed up along with all the other files. Deleting a message from your mailbox doesn't end its existence. Even deliberately trying to destroy it won't always get rid of it - as Oliver North and others involved in the Iran/Contra scandal found out after they thought they had removed messages from the White House e-mail system.

According to the Electronic Mail Association, a Chicago-based trade group, whether companies are legally entitled to read employees' e-mail is not clear-cut. Among other things, it depends on the network in use. If the network is public, such as MCI Mail, messages are protected by the Electronic Communications Privacy Act of 1986, which makes it a federal crime to read e-mail without permission. However, this applies only to public networks. If the system is used entirely within an organization and cannot be accessed from outside it, the act does not apply. An internal network that can be accessed by

outsiders is treated much the same as a public network for privacy purposes. This would include popular nets such as Usenet and Uunet.

Other laws may apply also, including state privacy statutes and those protecting certain kinds of information, such as medical records. The Epson and Nissan suits, for instance, were filed under California's privacy laws, which are stricter than their federal equivalents.

In general, the primary rule for organizations is to make sure that everyone understands the limits to privacy on the e-mail system. The safest stance for users is to assume that anything committed to e-mail may be read by third parties and to act accordingly.

Policy and Practise

As suggested, perhaps the key to e-mail control is setting a policy that everyone understands. Like just about everything else, this works most smoothly if the organization enlists the support of those subject to the rules rather than imposing something from the top down. The policy must be reasonable, not just in general but in relation to the corporate culture.

The idea is to bring order to e-mail, not to make it unattractive. As a case in point, some companies have forbidden non-business use of e-mail. Trying to enforce such a policy can waste effort and engender resentment. If the e-mail system fits into the work environment, a certain percentage of messages are going to be "personal" and many others will be marginal. For example, is making a lunch date with a coworker in another department business or personal?

It is important to decide just what e-mail means to the organization. It is a valuable communications tool but not a substitute for a company newsletter or file copies of documents. And some documents, such as those on which recipients must sign off, are better sent by fax.

Beyond user cooperation, many policies can be enforced by restricting the e-mail system itself. For example, you may want to limit the number of people who can be put on a distribution list. You can also set up the system so it will not accept e-mail messages that do not have a title.

For outside help, some companies, such as Beyond of Cambridge, MA, sell programs to help users manage e-mail. Beyond mail automatically sorts incoming mail, handles forwarding and can sort by headers or keyword in the messages. Some sophisticated users have written shell scripts to do the same kinds of jobs.

In any case, it's crucial to realize that handling the human factor fairly and openly deserves as much forethought as maintaining the system. To fulfill its purposes, e-mail must do more than go through rain and sleet.

Contributing Editor Rick Cook is a free-lance writer based in Phoenix. His work has appeared in a variety of publications.



TUUG Business Meeting Minutes

Tuesday, April 9, 1991

Attendance:

24 present, including 4 new members and 4 guests.

Random Access:

Discussions included PC to NCR Kermit upload problems, tape transfer problems, catalogs of computer parts and supplies, and a report on the ACE consortium (to develop binary standards for MIPS processor systems; members include Intel, Compaq, SG, DEC).

Minutes of April Business meeting:

Reviewed and accepted as presented in last newsletter.

Membership Secretary's Remarks:

A total of 33 members before tonight. Membership fees are \$20 per year, pro-rated, and are due in October of each year. Cost for the balance of the year is \$6. Four new members signed up at the meeting.

Newsletter Editor's Remarks:

We would like to include articles describing how members are using Unix in their work. If you have a novel application for your Unix system, or have any information to share on how you use your system, please contact Susan Zuk with your submission.

Treasurer's Remarks:

Financial statement reflecting our position at the end of March appeared in the May newsletter. No significant changes to report since then.

New Business:

A new option for local users wishing to set up a UUCP/Usenet feed was discussed. UUCP sites connected to a local hub system would have e-mail access to the Internet, and access to a small subset of the Usenet news groups (the set of groups available will vary with time and available resources). Currently, the hub node is a PC running Waffle, with a single modem for incoming calls from other UUCP nodes only. There is currently no fee to use the service. Users must agree to poll the hub once a day (to avoid build-up in the queues), and must abide by the accepted rules for Usenet access. If you are interested in such a connection, you can call Budi at 269-2658, or leave mail for user id "system" on the node "sys6626," which can be reached by modem at 269-0084 (24/12/300 bps, 8N1; login as a new user if you don't already have your own ID on that BBS).

A TUUG Conference, tentatively to be held this fall (Oct. or Nov.), was proposed to the group by the executive. There could be two tracks of sessions, one for techies and one for novices. We would try to get corporate sponsors to help cover the cost. Members present expressed a lot of interest in participating; some were also interested in helping with the planning. If you would like to help, please let us know soon.

Presented topic:

Grant Sidwall, of Hewlett Packard, who hosted the meeting, gave a presentation on the highlights of OSF/1. Afterwards, we had a look at the new HP 9000/700 workstation.