SoliNet:

A Computer Conferencing System Designed for Trade Unions

By Marc Belanger SoliNet

A labor union is a communications system. It exists to collect the views of its members, organize those views into persuasive arguments, disseminate them amongst its membership and finally communicate them to the employer. The effectiveness of a union's mission is largely determined by the success of its communications.

Right from the start unions organized themselves to communicate as effectively as they could. Their primary medium was (and still is) oral: talking to members, making speeches, organizing meetings and conducting classes. But very early on unions moved to adopt the major medium of the day: print. Not only was print effective in communicating to large numbers of members but also it was affordable. Unions could print leaflets, publish newspapers and produce position papers.

Later unions would begin to use film as an occasional communications tool. But they were never able to effectively use the other major media, which appeared on the scene. Radio and television were simply too expensive for unions to adopt in any significant way. Now however, as the world moves to re-organize its economic activity primarily around information, unions have an unique opportunity to, not only adopt the major medium of the day, but help steer its development.

Computer communications will undoubtedly play a pre dominant media infrastructure of the new information world. And we in the labor movement can use it to enhance our most essential activity our communications. But perhaps more importantly we can take advantage of the emergence of this new medium to guide it our way before it is completely overwhelmed by commercial interests and goals.

One experiment in the development of a union computer communications system is SoliNet the Solidarity Network. SoliNet is a computer conferencing system owned and operated by Canada's largest employee union the Canadian Union of Public Employees (CUPE). It is a public system opened to the general labor movement and its allies with approximately 1500 users. It is likely the world's only national computer conferencing system owned and operated by a union.

SoliNet was started in 1985. In the past seven years of organizing SoliNet we have learned many lessons and conducted many unique projects. This document will touch briefly on those lessons and projects with the hope that we can all begin to share the lessons we learn no matter which computer conferencing system we use.

Each of the topics we will discuss in this paper really deserves a chapter to fully examine. But here we will limit ourselves to just a few sentences each. Think of each section as just the door to a much larger room of information. Someday, after we've learned more computer conferencing lessons, we'll get together and furnish the rooms. We'll build an electronic House of Labor.

Defining the Terms First let's define a few terms. The sort of computer communication systems we are talking about come in two sizes: bulletin boards and conferencing systems. A bulletin board usually serves a local area and can accommodate a few users at a time. A conferencing system has many more features, can be accessed national and internationally, and can serve many users at a time. A computer conference is where a group of users share the same message base. Electronic mail is the sending of notes between individuals. And file transfer is the use of the system to pass computer files amongst the system's users. Participants use their microcomputer to place a telephone call to the conferencing system. This can be accomplished by a direct telephone call or via the country's computer communication system. Once connected to the system they can read messages that have been left for them and leave messages of their own. People do not have to be on the system at the same time as others in or communicate.

Organizing a Conferencing system the organization of the conferences and options available on a computer conferencing system is largely dictated by the capabilities of the system itself. But most can be organized to provide a unique feel to the organization using the system.

Some of the fundamental organizing questions will include: Who will have basic reading and writing privileges? Who will be appointed "moderators" and "system operators" and be granted extra organizing privileges (to, for instance, create conferences, remove objectionable messages and add users to conferences)?

SoliNet has three levels of users. The system operator is charge of operating the whole system and providing moderator status to particular users. Moderators can create conferences and remove messages within those conferences, which they did not originate. Members have basic rights to read and write messages in the conferences they participate in.

All the organizations, which use SoliNet, have at least one moderator. In addition, locals of unions usually have a moderator to organize their on-line activities.

Conferencing

The interests of the users of course, determine the sorts of conferences on a system. But there are fundamental types on SoliNet: basic conferences, topic conferences and special conferences. These conferences can either be open to the whole SoliNet community or closed to a particular group (with the moderator deciding who has access).

The basic conferences include: A central community conference in which all the members can discuss anything they desire. (on SoliNet we call it the Lounge). And a problems conference in which users can ask questions about how to use the system. (called Problems).

The topic conferences include: Labor Issues; Health and Safety; Women's Issues; Free trade; The Environment; Books; Cooking; Shop Stewards and many more.

The special conferences are usually month-long conferences on particular subjects of interest. For example, SoliNet has run conferences on: Labor Education in the 90s; Technological Change; Pay Equity; Employment Equity; Labor Databases and Full-Text Retrieval Programs.

The moderators of the conferences have to decide whether their conferences will be permanent or time-limited. The permanent conferences are those likely to have continuing conversations (such as a Shop Stewards conference). A time-limited conference usually concentrates on a special issue (such as Technological Change). Time-limited conferences are especially useful for generating discussion because the members feel a deadline pressure to contribute.

Moderating a Conference

The key to the success of a conference is usually a skilled moderator. A moderator has to organize the conversations (possibly by setting discussion agendas); cajole users into participating (it is a lot easier in a computer conferencing system to just read comments); link themes found in the comments; discipline members (for either overly-long comments or inappropriate comments) and more. Computer conference moderators are like meeting chairpeople with an extra set of skills.

Electronic Mail

By far the most popular SoliNet facility is its electronic mail feature. Members can talk to each other in complete privacy, or copy in other members.

Usually if a conversation in the mail side of SoliNet starts to extend itself and include a number of people there is a demand to establish a conference.

Before the introduction of SoliNet in CUPE our negotiators were limited in their discussions to their immediate peers. But now they can talk to other negotiators anywhere in the country on a regular basis.

Supporting Collective Bargaining

SoliNet is being used in a number of ways to support collective bargaining.

For example, CUPE has geographic areas, which have centralized their bargaining at one negotiations table. In the past it has been difficult to keep the bargaining committee informed between meetings because the members were geographically scattered. But with a SoliNet bargaining conference the committee members can continue their discussion while from their home base.

Another problem with wide-area bargaining is that the locals and members often feel that they are not kept up-to-date on events at the central table. This is especially acute during the latter phases of negotiations. However, on SoliNet central bargaining committees establish conferences open to the members and post regular bulletins of activities. This not only serves to inform the

members of the status of negotiations but ensures that they are more involved in the process and ready to support their bargaining committee.

Shop stewards also use SoliNet. They post messages of their concerns and problems into a closed conference. Others in the conference can help solve problems or point to precedents they might use in their relations with the employer. A shop steward conference is especially useful to a local or union with stewards scattered over a large city or geographic area.

Related to the shop steward conferences are the grievance conferences. Stewards and other union officers on SoliNet keep track of a grievance through all its steps by entering periodic reports into a conference. In this way all the shop stewards in the union can see what grievances are being processed and at what stage they are at. Conferences are also used to hold summaries of negotiations. If a negotiator reaches a settlement he or she enters a short description of the agreement in a conference. All the other negotiators participating in the conference can then be kept up to date on bargaining trends in their area and use the information in their own bargaining sessions. A search facility on SoliNet allows conference participants to search for particular agreement report by keywords.

SoliNet is also used for supporting strikes and organizing campaigns. For example, the public relations departments of the various unions, which use SoliNet, can quickly send copy for a strike leaflet or organizing pamphlet to the local negotiator.

Education

SoliNet has been exploring some very exciting uses of computer conferencing in education. We have operated a number of courses completely on-line (solely with the use of SoliNet). For example participants in a recent course on Technological Change never met in a class. Instead they interacted with their instructor and fellow students in a computer conference.

There are two major advantages to this sort of education. First of all, the students can participate in the course at their convenience. Secondly, instructors with particular skills (such as health and safety) can be made accessible to the whole country.

A variation of this service is the support of regular face-face-to-face classes. The students in a regular class can keep in touch with the instructor and their fellow students via SoliNet after the course is finished. For example, when CUPE equipped its negotiators with microcomputers it held a series of basic workshops. This included training on how to use SoliNet. Afterwards, a computer course was provided for the negotiators via SoliNet.

Another use of SoliNet is the gathering of data on who attends or teaches educationals across the country. The names and addresses of the participants are file-transferred to the union's central office and automatically entered into a central database. Students can be tracked through union education for prerequisites and certificates.

A particularly interesting educational project on SoliNet is the linkage of the labor movement with universities. SoliNet is working with the University of Athabaska (which is based in

Alberta) to provide university-level courses completely on-line. We hope this service will eventually allow unionists to complete a university degree via SoliNet.

But why stop there? There is a great potential for developing a global Labor University. Instructors and students could participate in educationals from anywhere in the world.

Research

SoliNet is being used to collect and disseminate research information and support negotiators in bargaining.

For example, summaries of collective agreements are posted in conferences. The information for these summaries is collected and organized via an on-line form. A secretary or a negotiator in a office calls SoliNet and chooses a menu item for Collective Agreement Report. A form appears on the screen, which they fill out. Once completed, the information in the form is then posted into a conference. The national research department then has a timely overview of the agreements, which are being reached and can analyze them.

Another service involves the use of spreadsheet files. The CUPE research department, for example, gets statistical information from a commercial database. It organizes this information and enters it into a spreadsheet file. The file is then transferred to SoliNet where it can be downloaded into the spreadsheet program on the computers of the union's negotiators.

Research departments also use SoliNet to help prepare briefs. By interacting with a negotiator or local union representative via SoliNet conferencing or mail they can gather information for (as an example) an arbitration brief. They can send drafts of the brief via SoliNet for discussion and then send the final product.

A current project being organized on SoliNet is a library of research papers. Increasingly the documents prepared by unions are in an electronic format. These electronic documents are being collected from the various unions and entered into SoliNet. In this way the Canadian labor movement is building an on-line labor library.

Political Action

SoliNet has proven particularly effective in developing political action campaigns. Activists organizing the campaigns, for example, can keep in touch using a SoliNet conference. They find out about tactics that are working in other areas, learn about government counteractions and brainstorm ideas for new actions.

SoliNet is particularly useful for quickly distributing leaflet copy. The central organizing committee can make available on SoliNet a leaflet that can be downloaded by local area people and quickly distributed. A great advantage of this form of leaflet distribution is that the copy is easily editable for local angles and information.

This capability proved itself recently when a provincial government in Canada organized a touring committee to study potential changes in a piece of legislation. The CUPE research department prepared a "core" brief that local unions could present to the traveling committee.

The local activists edited the core brief, added their own angles and information and then presented the brief to the committee. In this way, many organizations around the province were able to influence the committee's work.

Supporting Publications

The capability of electronic documents to be easily editable has been used to help local unions prepare their newsletters.

For example, a central organization of labor newspapers posts monthly news packages on SoliNet. The members of the organization download the package, edit the stories for local angles, and use them in their local newspapers.

SoliNet is also being used for disseminating media releases. For example, the Canadian Labor Congress enters all its media releases in a SoliNet conference. This not only gets its news and views out to affiliated unions but as well provides copy for union publications.

SoliNet itself provides a weekly labor news service called SoliNotes. Every Monday approximately five pages of labor news are entered into a SoliNet conference. The news is gathered by searching various databases and re-writing the articles. SoliNet members can download the newsletter, photocopy it and distribute it around the work place. As well, union publications can use SoliNotes to augment their publications. Canada now has a weekly news service something it could never have had if we had to depend on printing a newspaper and mailing it. One consequence of this is that a whole new category of news is being made available to the movement. More timely items (such as when a union goes on strike or is affected by layoffs) can now be reported without being labeled stale news. Items, which would have been labeled stale, would not normally have been reported in a monthly publication.

Full-text retrieval

SoliNet is currently working on providing a full-text retrieval system. This system will allow users to up-load the text of complete documents, such as employment contracts. Other SoliNet members can then use sophisticated searching commands to find particular documents.

For example, the CUPE Job Evaluation department is preparing a Job Description Database. Individual job descriptions will be entered into SoliNet and these descriptions will be searchable for particular items. Users will be able to download the descriptions they need.

The full-text retrieval system we are developing is based on a separate program, which operates on the same computer as SoliNet. Members will exit the conferencing system and use this

separate program for their searching needs. In the next generation of SoliNet we will be integrating full-text retrieval into the conferencing system itself.

Administrative Support

SoliNet is also being used for union administration. For example, negotiators in the field can now electronically file their expense accounts via SoliNet. And local unions can ask the central office for information on their per capita payments.

Another project we are working on is the development of a central database of names and address in CUPE. Local CUPE offices will be provided with a computer program to produce their mailing lists. Files from these programs will be sent to the national office and merged into a central database.

Inter-Union Communications

One of the great advantages of SoliNet being available to the whole Canadian labor movement is interaction between the various unions. This has lead to the development of coalitions, the organizing of inter-union workshops and co-ordination between unions on bargaining issues.

As well, SoliNet is helping to build a better sense of community amongst unionists in the country. By allowing activists in various unions to communicate with each other SoliNet is helping to build the strength and cohesiveness of the Canadian labor movement. We hope that SoliNet's example can be used to develop greater labor movement cooperation around the world.

CCing: The Next Generation

Almost all the computer conferencing systems currently in place are first generation, character-based operations. But computer conferencing is changing very quickly. There are three major forces at work developing the next generation of CCing systems:

First of all, computer conferencing systems are starting to be tied together into a global network called the Internet. In essence the Internet is a method of connecting a large number of databases and conferencing systems. People can use the Internet to enter databases around the world and send e-mail messages to other Internet users. Originally the Internet was designed for the American military but it quickly became a network, which also connected academic institutes. Now many other organizations such as SoliNet are linking themselves to the Internet.

The second force at work in the development of CCing is multi-media. The current systems are almost all character-based and relatively difficult to use. The new systems now coming into play include icons, mouse-driven operations and advanced text handling features. The third generation will include sound, video, voice recognition, sophisticated database operations and other features.

The third force affecting computer communications is cost. The hardware and software expenses related to the establishment of an internal e-mail system on a Local Area Network are dropping. That has advantages as more organizations can afford to develop their own systems. But it has disadvantages as well. Unless organizations adopt common systems or standards they will not be able to easily share their data or the special programs they create.

Where will the labor movement fit into all this? It depends mainly on whether the unions control wide-area computer conferencing systems or are clients on commercial systems. If they have their own systems they can adapt them to their needs and continue to participate in the growth of the medium. If they remain clients on commercial services they will be forever subject to the dictates and capabilities of whatever service they subscribe to.

Consider the Internet for example. If unions owned their computer systems they could develop databases with programs and information designed especially for the labor movement. A commercial service might provide space for labor information but would be unlikely to provide special data collecting or retrieval programs at an affordable cost.

Or consider the advances in computer conferencing. At the moment we are all working at the same level: all the systems are first generation, character-based. A union system such as SoliNet is not much different than a large commercial system such as Geonet. Our members see the two systems as being roughly at the same level of service and capability. But soon, as millions of dollars are spent on the development of second-generation commercial conferencing systems, union operations will seem archaic. Our members will not want to use our systems because they will be perceived as second-rate.

Or take the drop in costs related to the development of in-house e-mail systems. More unions will be able to afford systems for their organizations. But the danger will be that they will all go their own separate ways. Unless we adopt standards or use common systems we will segregate ourselves into isolated systems.

What's more, even as the cost of developing computer communication systems drops, labor movements in poorer nations will not be able to afford their own systems without some assistance. We will see a growing gap between information-rich and information-poor countries with dire consequences for working people in the poorer countries.

What can we do about all this?

Towards A Labor Network

We are witnessing the birth of a major new medium computer communications. We can participate in its development and consequently ensure a labor presence in the medium as it matures. Or we can relegate ourselves to a client role in the major networks as they develop.

Think of radio in the 1920s or television in the 1950s. If labor had pooled its resources at the birth of these media it could have influenced their development and become a major participant in them. But it did not. And today we are effectively locked out of each medium. In ten or twenty

years will the labor movement be bemoaning its lack of access to the world's major computer communication systems? Yes it will unless we co-ordinate our efforts and resources today.

The labor movement has a unique opportunity to develop its own worldwide computer communications system. We can do this in partnership with existing operations such as Poptel in Great Britain and The Association of Progressive Communications (which has affiliates in the U.S., Great Britain, Australia, Canada and other centers.) Here is the idea:

The international labor movement should establish a global computer communication network. This network would consist of computers acting as conferencing systems locally, nationally or internationally and all capable of sharing conferences and electronic mail. The immediate goal would be to establish at least one computer system in each continent or large country.

These computer systems could be established by the labor centrals in each country or by international labor bodies. These organizations could use their in-house computer departments. Or they could work with outside organizations sympathetic to the labor movement such as Poptel or the APC. As well, individual unions could establish their own in-house systems using the same hardware and software. Richer nations could be encouraged to develop their own networks. Poorer nations could have their networks subsidized for them.

SoliNet Version 2.0

The key to the development of this sort of global labor network is the adoption of a standard computer conferencing system. This system should be able to meet the current computer conferencing needs of organizations as well as be able to grow as the medium matures. That is why SoliNet has been part of a development group designing a new computer conferencing system to produce the second generation of SoliNet. SoliNet Version 2.0 is based on a program called CoSy, which has been produced by Softwords a company based in Victoria, Canada. It incorporates all the features unions and labor centrals will need to establish their own conferencing systems and grow with the medium. It can connect to the Internet. It can be programmed for specific labor projects. It has multi-lingual capabilities. And it can share conferences with other SoliNet systems. It is the result of all the lessons SoliNet has learned about computer conferencing and labor unions in its eight years of activity.

SoliNet Version 2.0 can be purchased directly from SoliNet. Organizations can purchase just the software and run it on their existing Unix-based computers. Or they can purchase a complete computer system, which just needs to be plugged in. The cost of the software depends on the number of users served. But for example, a license for 1,000 users would cost \$10,000 (U.S.).

The cost of the hardware needed to run the program would be approximately \$15,000 (U.S.). The establishment of a complete system, which could act as a node in a global labor computer communications network, would cost \$25,000 (U.S.) The data communication charges would depend on the usage of the system.

The Global Labor Movement

Labor movements can no longer afford to isolate themselves within their nation states. As the global economy develops they will have to build strong linkages with unions in other countries. Computer conferencing can be an effective tool in helping to build these linkages.

But the opportunity to develop an international labor computer communications network is not unlimited. We must grab it now as the medium is emerging. If we do, we can create an exciting and effective way of building international labor solidarity.

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