

In Their Own  
Words:

The Story of  
National Capital  
FreeNet



Third Edition – June 2014



This book is made available under a Creative Commons Attribution-ShareAlike 2.5 Canada (CC BY-SA 2.5) licence

You are free:

- to copy, distribute, display, and perform the work
- to make derivative works
- to make commercial use of the work

Under the following conditions:

- Attribution — You must give the original author credit.
- Share Alike — If you alter, transform, or build upon this work, you may distribute the resulting work only under a licence identical to this one.

With the understanding that:

- Waiver — Any of the above conditions can be waived if you get permission from the copyright holder.
- Public Domain — Where the work or any of its elements is in the public domain under applicable law, that status is in no way affected by the license.
- Other Rights — In no way are any of the following rights affected by the license:
  - Your fair dealing or fair use rights, or other applicable copyright exceptions and limitations;
  - The author's moral rights;
  - Rights other persons may have either in the work itself or in how the work is used, such as publicity or privacy rights.

Notice — For any reuse or distribution, you must make clear to others the licence terms of this work.

# In Their Own Words:

## The Story of National Capital FreeNet

Edited by  
Adam Hunt  
fn352

National Capital FreeNet  
Suite 206 Richmond Square  
1305 Richmond Road  
Ottawa, Ontario K2B 7Y4  
Canada  
<http://www.ncf.ca>

## Change Log

- First edition – initial version
- Second edition – added “What People Said About This Book” section, plus some minor text corrections
- Third Edition – corrections and updates from Doug Hull

# Introduction

This is the story of National Capital FreeNet, one of the last remaining FreeNets still in operation. Rather than a relic from the early days of the internet, though, NCF is still going strong as a not-for-profit, community-owned internet service provider.

This is not an academic history of NCF. That sort of history can be found [on Wikipedia](#), instead this is a personal history, a collection of stories, quotes and anecdotes from throughout NCF's history. As such there are gaps in it, parts left out and there may even be disagreement between people quoted as to what happened and when. This is unavoidable in this sort of history, I but only adds to the colour and interest, I believe.

I hope I have quoted all who participated accurately. Any errors you find are entirely my own and will be fixed in later editions, wherever possible.

Are you part of NCF's history? Send me your story for possible inclusion in a future edition of this book!

Adam Hunt  
fn352@ncf.ca

## What People Said About This Book

Thanks for doing this, Adam. I had a quick read and enjoyed it very much. It sure brought back memories. - Dave Sutherland, NCF founder

You did a great job. We need a lot more social histories recorded like yours -- they tell us about the way unplanned converging contingencies collide to actually make things happen. Also, it was great fun sharing my memories of those early days with you. - Jay Weston, NCF founder

Wow Adam - what a great e-book! You've done amazing work here putting all this together. Thank you so much - you've captured the history and essence of FreeNet, its evolution, and the people involved. - Jean Wilmot

...it looks good! I like the interleaving of the major industry events to give the reader reference points in time. - Nick Ouzas, Executive Director, National Capital FreeNet

An exciting story, well told. Greatly enjoyed the read and insights. - Doug Hull, Director General, Industry Canada (retired)

## Welcome to our Net

In the early days the internet was seen in a very different light. Today it is where people do their banking, buy things, book airline flights and stay in touch with their friends and relatives, but in the early 1990s it was seen as more like a jungle, even though it was actually far more benign then than it is today.

This was written in 1995 and quoted on the back cover of the NCF book, *Freenet For The Fun Of It*:

“Answers to the oft’ asked question: What is the Internet?”

- Everything on the Internet comes from the human mind.
- It’s made up of every aspect of human thought.
- It can carry all knowledge, the results of all research.
- It can carry hate, mockery, sacrilege, love and honesty.
- It can represent every nuance; every individual interest.
- It’s all the things we like to think of as humanitarian.
- Its also evil and jeering and self aggrandizing.
- It’s stupid and it’s sage.
- It’s irresponsible, and at the same time concerned.
- It’s all the things we are.
- Its all the things we think we are.
- It’s all the things we want to be.
- It’s all the things we don’t want to be.
- It’s violent, sex driven, lustful and power driven.
- It’s the mind of man, woman, and child.
- The wider its use, the better it reflects the human mind.

- This global mind reflects only the minds of its users.
- Now, you're in it too.
- The minute you log on, you are part of the global mind.
- You'll find counterparts for everything about you.
- The Internet is a community without boundaries.
- It's a million communities of like-minded people.
- Its communities are not limited by physical proximity.
- it all starts with our own local Network.
- In fact, it all starts at your fingertips.
- Welcome to the global mind.
- Welcome to Our Net.”

# Chapter One

## The Beginnings

National Capital FreeNet started at a luncheon that was held in October 1991 at Carleton University in Ottawa. Jay Weston of Mass Communications and George Frajkor of the School of Journalism and Television Programming invited Dave Sutherland, the director of the university's Computing and Communication Services Department, to have lunch with them to discuss the idea of establishing a free-net, based on the concept of the Cleveland Free-Net.

In the summer of 1992, the free-net was launched as a pilot project, using Carleton's computers, which were not used very much during the summer. Industry Canada helped persuade Sun Microsystems to donate one computer and Gandalf Technologies supplied the first modems put into use.

It was underway!

The first NCF board meeting was held on 10 December 1992 with Sutherland as Chairman. At that point the organization boasted 4 dial-up lines, its own logo designed by a graphic artist and \$2120.00 in cash.

National Capital FreeNet had its official public launch on 1 February 1993.

Dave Sutherland describes the background, "When Jay Weston and George Frajkor approached me with the idea of starting a community network project, the Internet was not new. What was new was its spread outside the American defence complex into the academic community. Carleton University joined the Ontario Internet in 1989 along with a few

other Ottawa institutions such as the University of Ottawa, the National Research Centre and the Communications Research Centre. It was, however, a “blinking cursor Internet” which provided a few applications such as email, file transfer and “newsgroups” via a character-oriented dumb terminal connected to a mainframe using a dial-up modem at 2400 bps to 9600 bps.. There was no general public access to the Internet although a number of commercial (and expensive) services did provide proprietary electronic mail and information services.”

Dave Sutherland explains what was new about this: “The Freenet concept, initiated at Case Western Reserve University in Cleveland, was revolutionary. It provided donor-supported access to local and Internet services via a simple menu interface suitable for use by the general public. The initial emphasis was on local rather than Internet services with local institutions acting as “information providers”. Local email and discussion forums (newsgroups) were the early focus.”

From the preface of *The Official FreeNet Survival Guide*, updated version, April 1995: “The National Capital FreeNet is a computer-based information sharing network. Its goal is to link the people and organizations of this region, provide useful information, and enable an open exchange of ideas with the world.

“Community involvement makes FreeNet an important and accessible meeting place, and prepares people for full participation in a rapidly changing communications

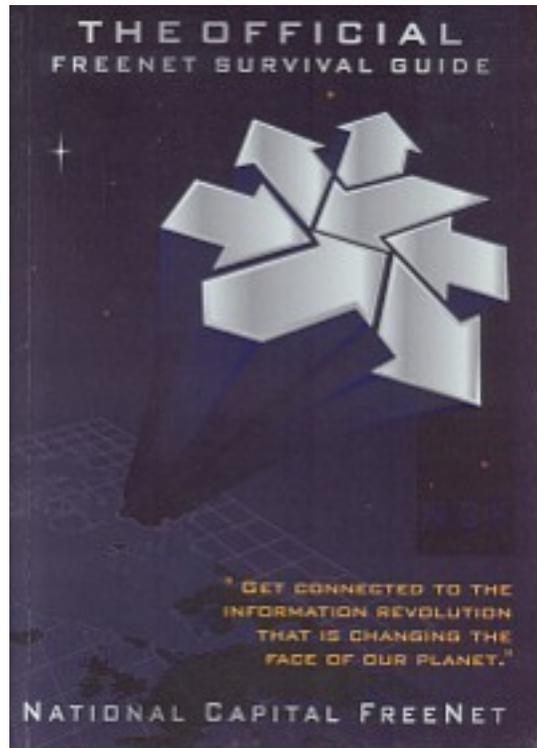
environment.

“NCF is a not-for-profit organization that provides a way for individuals to share data within the region and enables organizations to deliver community services and information. The heart of a Free-Net is a central computer network dedicated to storing and retrieving thousands of information files and relaying thousands of electronic

messages each day among members and organizations.

“Anyone can use the FreeNet from home or the office by using a computer, modem, and standard telephone line. Easy access is also available at public terminals located in community spaces such as libraries and schools.

“There is no charge to be a registered user or information provider on the National Capital FreeNet. NCF is free to use, but not free to run. The NCF operates on donations, sponsorships, and grants from individuals, businesses, organizations, and institutions. This generous financial support along with the work of volunteers in the community makes NCF one of the most active Free-Nets in the world.”



Jan George Frajkor, one of the founders of NCF recalls his part in how it all started:

“My first memory of Freenetting is when I, as a professor of Television journalism, was exploring in the fall of 1991 what was then called ARPA Net, the U.S. Defence Department's invention that connected science and technology all across Universities and Businesses. I ran across Case Western Reserve University in Cleveland, and found out that Dr. Tom Grundner had invented and founded the Cleveland Freenet – number one in the world.

“By total coincidence, Prof. John R. (Jay) Weston, a professor of Communications, was walking by my open office door at that time. I said something like: “Hey, come look at this.” He did. He saw the potential immediately. He said we should do something like that at Carleton and make it the Ottawa universal community websystem. It would not be a business gouging the users. It would be something everybody could use, cheap and fast, on every subject. A huge townhall discussion on anything of interest and importance. We both thought it should be done.

“We then approached David Sutherland, who was the Director of Carleton's Computer system at that time. He was probably more enthusiastic that we were. He was willing to let the potential Freenet use some of Carleton's computer system at no price, and willing to get the information and the software system – called, I think, Freeport – from Case Western himself.

“Let me say that from then on, my role was doing a lot of thinking and proposing ideas, and promoting the Freenet. In those early days, there were computer associations and I, as a member of the Commodore 64 club, and later Atari club,

gave promotional lectures on Freenet. But Dave Sutherland and Jay Weston did the major necessary work.

“Jay had influence with Carleton's Academic system and the University board, and persuaded them to go ahead. Jay taught a computer communications course before many Canadian universities did.

“Sutherland knew every computing expert and computing company in Ottawa, and went after them for help, advice, programs, ideas and equipment. He actually got some companies to GIVE Freenet modems and major computing equipment, free. He organized many giant discussion meetings that brought experts from universities and businesses all over the Americas to Carleton, or to other Ottawa meeting places. In fact, in 1992, Tom Grunder himself was one of the principals at a great meeting here.

“Also at Carleton itself I remember Warren Thorngate, Ross Mutton and Robin Allardyce gladly joining us to get the Freenet Corporation going. (I will have to say I cannot remember all names involved –there were many more). We had many meetings ... sometimes weekly, sometimes monthly, and we actually were operating as a Freenet by September, 1992. Chris Cope was our very first President as I recall. So give him a hand at our anniversary party. Incorporation, with charter changes, came in the spring of 1993.

“Donations came in quickly. Freenet moved out into its own offices instead of the University. And Freenet to this day can keep up with fast-moving technology advances, because the people running it have the same will as those who started it decades ago.

“The purpose of Freenets – if I am not mistaken there are many in cities around the world – is what I would call REAL social media. People can yak to each other publicly or via email. Local car mechanics can answer repair and price questions. Local civic politicians can inform the people about civic things like snow removals, street repairs, and autobuses. Librarians can answer questions about information. Anyone can start up a discussion list, and anyone can then discuss the subject.

“Freenet has changed a lot. And for the better. The work by our volunteers and by those who work full time was amazingly good from the start, and still is today.

“That's what we wanted. That's what we have. Let's hope the same freedoms are what our children and grand-children will have.”

It was also in 1991, while a student at the University of Helsinki, that Linus Torvalds wrote the first Linux kernel, ushering in the era of free software operating systems. Today the majority of smart phones, most servers, almost all super computers and DSL modems run Linux, as do many desktops. NCF's servers and desktops all run Ubuntu Linux.

Jay Weston was a professor of Mass Communications at Carleton University and describes his part in how NCF started:

“I was teaching a course for the school of journalism. My background was in social and political thought and research methods and statistics and I had been in communications when they started those programs down in the United States when I did my graduate work at Michigan State in this brand new field called “communications”. Actually my

undergraduate degree was in economics and to get into graduate school, what I liked about communications was that I didn't have to do any more economics, because there was no undergraduate program in communications, so they had all kinds of people. It was a big research staff kind of thing. In the 1960s I was using the mainframe which was a CDC 6500 or something. It had a whole building to itself. Now my kids look at me and they say, 'a card reader, really?' So I have always been a really serious user of computers. I was teaching at York [University] in [the Social Science Division] and the school of journalism wanted to expand the journalism program beyond the purely professional aspect, they really wanted to start a program in 'communication'. Which would look at the social and cultural [aspects], how the media actually fit in. They wanted to do it before sociology or political science or somebody else grabbed it. I was really brought in to begin teaching courses in that area. My problem was ... I didn't much care about the mass media I was more interested in language and how we frame the world, that sort of thing, how we build vocabularies around what we talk or want to talk about.

“I was teaching a course in 1988, which had the humble name of 'Communication, Technology and Culture', which really meant, if I did that properly, that there was nothing left for anyone else to do. I had a Franklin [computer], which was an Apple clone ... I was teaching this course and didn't know very much about computers. I only know how to use them. In those days they were kind of research machines for number crunching and at the university in the office for payroll and that kind of stuff. The School of Journalism was teaching this course and that is how I got to know David Sutherland, he was the head of computing services and the director of the school wanted to get the Underwoods [manual typewriters] refurbished and Dave wanted to sell him on the idea of a

mini-computer, a Dynasty, that was being rejected by the Engineering Department, who had no further use for it. George Frajkor, who was a colleague of mine, we were trying to tell him that the future was not in Dynasty and certainly not in getting those Underwoods refurbished, we wanted to get them them started on some sort of small computer...That was how I got to know Dave Sutherland. I was still carrying punch cards around.

"I was aware in about 1987 about email and, as a faculty member I had an email account. You could talk to almost anyone on campus who had one, which was almost no one. Since communication was my field, I could see that this was going to be 'something'.

"In 1988, before we were involved in the FreeNet idea, I wrote an article...talking about the experience in my class of graduate students, who I am pretty well convinced that they were the first non-engineering, computing science people who had...[computer account] permissions from any university. This was the really the first course that I was aware of where they actively went out to actively search the internet, make connections and start getting information beyond their own library...the culture that I was in at that time in the Arts Faculty. I think that just about everybody in the Arts Faculty saw the personal computer, or whatever it was called then, as some kind of microwave oven with a telephone attached. This caused very little excitement in the university except for the people who were in the course, because Dave Sutherland had personally let these people have email accounts, with the understanding that when the course was over they would have to give them up and they weren't going to give them up.

"We were doing this little course and in 1988 or 1989 it was

actually George Frajkor who said, 'have you seen these kids are making reference to Cleveland Free-Net and contacting people there?' I said, 'yeah, what is that?' and he said "I don't know", but the students and the people in Cleveland were on BitNet. He said 'I think we should get our students to sign up for the Cleveland FreeNet'. Then I guess we said, 'why would we get them to join [Cleveland] FreeNet, why wouldn't we just start one?' George actually knew more about computers than I did and the real beginning was when he contacted the Heartland FreeNet in Peoria, who had made a video of what they were doing and they sent it to him and we sat down and watched it and we said 'wow this is what we want to get into, if we can'....We gave it to Dave and we didn't hear anything, we didn't hear anything. And then, all of a sudden he said, quite excited, 'let's have lunch'... He was at home fiddling around in the kitchen when his wife, June Hacker, had been watching TV, but actually she was watching the video he had taken home and hadn't done anything with and this voice from the living room said 'Dave, I think you had better get in here and watch this!'"

From *The Official FreeNet Survival Guide*, updated version, April 1995: "Required Equipment : Anyone with a home computer, a modem, and a communications package can connect to one of FreeNet's lines/modems by using ordinary phone lines. You may also use a terminal and modem.

"In order for two computers to communicate via the telephone system, each must be equipped with a device called a modem. A modem is a piece of electronic equipment that allows a computer to send and receive information over the telephone lines.

"For the communication process to work, your modem and NCF's modems must be compatible. Fortunately, industry

standards have been established and users need to make decisions about only a few primary functions.”

Lynx, an early text browser used by many early FreeNet members, was first released in 1992 and remains actively under development in 2014. It is the oldest web browser currently in general use.

Jay Weston recalled some of the reaction to the rise of the FreeNets and how it impacted the potential ability to commercialize the internet, “In 1993 Richard Stursberg, who was with Unitel, referred to us [NCF] once as 'those bastards who are giving away email'. I didn't hear that, it was Dave Sutherland who told me. That problem of just where you locate the FreeNet, was right there even in our own board in the early days. There were a lot of people who...loved the idea that people would have access to these technologies, but they really hated the fact that anyone would be trying to give it away. 'If you are not making money then why are you even doing it?' I really do feel that when there were no ISPs around that the ones who were starting up ISPs wanted our list of people.”

From *The Official FreeNet Survival Guide*, updated version, April 1995: “Does every city have a FreeNet? Not yet is the best answer! NCF officially went on-line February 1, 1993. At that time, the only other FreeNet in Canada was in Victoria, BC. In the subsequent months there has been a flurry of interest in the concept of community computer networks and organizing committees have formed in cities across the country. To visit other community networks, type 'go freenets' at the 'Your Choice ==>' prompt.”

In an interview in 1995 quoted in *Freenet For The Fun Of It*, Jay Weston stated, “I like everything about the Net, even the

annoying things. It is what it is. The people who are there are who they are. Unlike television, the Net is an instrument to be played, not a product to be analysed. It blurs the old categories of information and entertainment as both become verbs rather than nouns, something you do rather than something you get.

“As for likes and dislikes on the Net Jay says, “There are now in excess of 200,000 URLs and this is just the start. The search engines like Open Text will send me in directions I hadn't dreamed of. The old mass media sites are ones I've learned to avoid. They insist on mindlessly transcribing their old one-way values, procedures and products onto the Net which is inherently the opposite of these.

“Regarding the current media fascination with the Net, “until the Net,” he says, “they'd had the technology thing pretty much all their own way. Except for what we experienced first hand, we'd come to rely on the mass media to tell us what the world was about.

“The Net permits, even demands, that the way the world now gets told will be widely distributed, not narrowly constrained. In short, the mass media have had their 'golden age', even though they are still around. We are now witnessing the old mass media putting on brave faces, reporting their own decline with morbid fascination.

“The mass media are uninformed about the Net and fighting a desperate, losing campaign to prevent their audiences from becoming their competitors for the available Network time. What survives of the mass media will be better, but much of it won't survive, and much, more of a re-imagined mass media will be stillborn. But the Internet model is extremely robust, built to withstand all assaults. Its designers have done

extremely well.

“Weston sees cabco and telco attempting to control the Net through value pricing rather than cost pricing policies, “but in the end these artificial measures will fail. The telcos will come to realize that their future is in delivering a dumb system, a patchwork of copper, fibre and wireless, like the telephone where their clients provide all the multimedia content. Virtually all of the competing futures will be accommodated within this super Net.

“Some voices will be louder, some better than others, some will be encrypted, some not, some will be regulated, some not, some will mostly download others’ products, some won’t. ‘One thing will not happen. The distributed transmission capability of the Internet model will not be removed as we transmute from a centralized mass media society to one that’s distributed and decentered. But the wars between the old and the new order,’ Jay Weston assures us, ‘will be marvellous to behold!’”

From *The Official FreeNet Survival Guide*, updated version, April 1995: “Is the National Capital FreeNet really free? Who pays for it? NCF is completely free to use. It is not, however, free to operate. Our annual operating budget is about \$300,000 and we depend on government grants corporate sponsorships, and most importantly, private donations for survival. Please type 'go funding' at the 'Your Choice ==>' prompt to find out how you can contribute to the growth of our FreeNet.”

Also from *The Official FreeNet Survival Guide*, updated version, April 1995: “Who runs the National Capital FreeNet? NCF is run by a corps of volunteers (organized into a Board of Directors and a variety of subcommittees) and four

employees. NCF encourages you to read the NCF policy documents and to participate in the Board Discussion groups. To participate in Board discussions type 'go board' at the 'Your Choice ==>' prompt. NCF's policies can be found at 'go policy'."

Here Dave Sutherland is introduced by the book *Freenet For The Fun Of It, 1995*: "Dave Sutherland is a National Capital FreeNet pioneer. He was the founding president and still serves in that capacity. As the greatest FreeNet ambassador in Canada, Mr. FreeNet personified, Sutherland has been on-line at NCF since the very beginning. His id tells the story. It's aa001, how much earlier could you get? And even before there was a freenet, he was on-line experiencing the growth and expansion of the Internet.

"Dave Sutherland is also a founding member of Telecommunities Canada, an organization of Canadian freenets from the Atlantic to the Pacific, and is a member of the federal government's Advisory Council on the Information Highway.

"When not running the Computer Department at Carleton University Dave is one of the most helpful Netters that you will encounter. He tells us his major likes on the Net are the interesting people he meets here and his major dislikes are the boring ones. As for his Net-surfing habits, well, for true relaxation, the president of our National Capital FreeNet reads the vast variety of information and commentary that appears on our own local freenet."

Jay Weston recalls that the early board of directors which were all appointed at first. "I only stayed on the board for about six months because they wanted elections, an elected board and somebody wanted everybody to just resign. That

would have been a disaster. You take everybody who knows anything out and they came up with a plan that a third would turn over every year instead. They needed three people to say 'I will get off [the board], I'm your boy'."

Dave Sutherland talks about the connection to Industry Canada and SchoolNet: "In the summer of 1992, I was invited by Karen Kostaszek, a Carleton Engineering student, to demonstrate the FreeNet prototype to Doug Hull, a Director General at Industry Canada. Doug immediately saw its potential. He convinced Sun Microsystems to donate a server to the project. Doug also foresaw the potential impact of the Internet on education and went on to design and lead Canada's SchoolNet project which was instrumental in promoting Internet connections for all the primary and secondary schools in Canada."

Doug Hull was Director of Science Promotion at Industry Canada when NCF was starting up. Through Rafiq Khan of Industry Canada's Electronics Branch and Digby ("Diggere") Williams of the National Research Council, he received a request for funding from NCF because, after the summer of 1992, NCF needed to buy its own servers and modems to keep the organization running and was short of funds. The new internet wasn't within Hull's area at Industry Canada, as that belonged to the Electronics Group, but he managed to provide some money under *science promotion*. NCF also was connected with some Ontario government funding sources. The National Research Council also provided funding "in-kind" support.

Hull also recalls that at that same time he managed in the Canada Scholarships Program. Trying to distribute information on this to all the schools in the country lead to one summer engineering student, Karen Kostaszek, to suggest

that Industry Canada do this via the new internet, rather than the mass of paper mail outs that were getting ignored by schools. This idea led to the highly successful and ground breaking SchoolNet program at Industry Canada. It started as a pilot project to connect a few schools and quickly led to a nation-wide effort to connect them all. Canada led the world in connectivity at that time when dial-up ruled and became the first nation to connect all its schools, libraries and communities, through the Community Access Program, well ahead of the USA and the UK.

The SchoolNet program led Industry Canada to look for its own server at the same time that Dave Sutherland was also looking for a server for NCF. Hull and Sutherland were friends and combined their efforts, getting a Solaris Unix server donated for their joint use by Sun Microsystems. Karen Kostaszek became a key person in getting SchoolNet set up and running. When schools had trouble funding dedicated dial-up phone lines Bell stepped in and donated the lines to make the project work.

Based on the success of SchoolNet, Industry Canada established the Information Highway Application Branch (IHAB) with Hull as Director General. The federal government moved to promote and encourage internet connectivity and use it as a means of more efficiently delivering government services. This policy decision led to a large number of community-oriented internet connectivity programs, including SchoolNet, LibraryNet, the Community Access Program, VolNet, Digital Collectives, Smart Communities, Net Corps and related youth employment projects. These all provided funding to connect not just Canadian schools, but libraries and community centres as well.

Hull said that his involvement in implementing the

government's connectivity agenda was the highlight of his career, being part of those “heady” early days of rapid internet expansion.

From *The Official FreeNet Survival Guide*, updated version, April 1995: “Modem Speed : FreeNet’s modems are standard asynchronous modems, designed to move one character at a time, and will operate at speeds from 300 to 14,400 bps. should be compatible with one of these speeds. Choose the highest speed your modem supports.

“FreeNet supports the international CCIT standard for data compression (which is called V.42bis) on its higher speed (14,400 bps) lines.”

Jay Weston discusses the legal concerns about free speech on the internet for NCF. The NCF board “wasted so much time worrying about getting sued for slander or something like that. People were always wanting to come up with rules. There were even proposals, I don't think they ever made the minutes, to come up with a set of rules for kicking people out just for being nasty, let alone for being libelous ... I said, first of all, 'hardly anyone ever gets sued, they just talk about getting sued and you don't worry about that.' I'm not a lawyer, but I don't think the board of directors would be personally liable for all of that. More importantly, it would be nice if we were sued. This has to be tested somewhere. This is a community endeavour and so you are suing a community. We should be the ones to get sued, not some little ISP who wants to start his company. We shouldn't be looking for ways to exclude people, we should be looking at ways to include them. We should be a place where all of the problems that exist in our community can be discussed. They hated the idea, most of them. They hated the idea that there would be nasty stuff there. I said, 'look we have rules, laws in this

society already, you don't have to make up new ones. You are responsible for what you say if you slander me, we don't have to invent those things'. I put up the position that if you say this is a public space you can say things that are offensive if they have to, you can say that, but it isn't libelous. If you start to monitor that stuff, then anything that gets up there you are responsible for, because you are monitoring it. If you don't monitor it, you can say this is like a soap box in Hyde Park, you can't sue the park if somebody stands up and says something offensive. But once you start making rules about who can speak then you are responsible for what they say...This wild thing is not going to be caged again. The internet cannot be caged.”

Dave Sutherland describes the FreeNet organization: “Through the summer of 1992, the organizing committee recruited “information providers” to provide the local content which was the focus of the project. By September, we believed that the project was ready for a public announcement. Dominic Lacasse from the Ottawa Citizen wrote a front page article called “The Keys to the Wired City” which described what we were doing and publicized our planned meeting. The meeting, held at what is now Ottawa's city hall, attracted so many people that we had to move it to bigger rooms twice. None of our demonstrations worked but the crowd got it. There was spontaneous cheering several times during the meeting; the enthusiasm was amazing. We recruited a lot of very skilled people at that meeting some of whom subsequently were elected to the first Board while other worked on various aspects of the project such as recruiting information providers and technical support. Some of these same people are still involved with the project after 20 years!”

Pat Drummond, an early volunteer recorded some of the

people involved: “The founding National Capital Freenet Organizing Committee was comprised of: Dave Sutherland, June Hacker, Tandrae Knapp, George Frajkor, Jay Weston, Warren Thorngate, Ross Mutton, Robin Allardyce of Carleton University and Richard Mount of Mount, Yemensky, Daigle, Barristers and Solicitors. ”

“The committee met almost weekly throughout the remainder of 1991 and the first half of 1992, planning the project. The first public meeting in March of 1992 at Carleton University brought another 100 people from 50 organizations into the project. Software was acquired from Case Western Reserve University and installed on a system at Carleton at the end of April.

“Monthly meetings of the extended organizing committee were held throughout 1992. Gandalf Technologies donated modems and the communications equipment for connecting the Ottawa Public Library in September. In October the FreeNet was moved to a SparcStation 10 provided by Sun Microsystems in cooperation with Industry Science and Technology Canada.

“A formal public opening of the system was held on February 1, 1993 at the Regional Municipality of Ottawa Carleton headquarters. Invited speakers included Tom Hockin, Minister for Science; Dr. Tom Grundner, President of the National Public Telecomputing Network and founder of the Cleveland Free-Net; Peter Clark, Regional Chair and Dr. Robin Farquhar, President of Carleton University.”

Jean Wilmot, an early NCF board member, recalls the very beginnings at NCF:

“As you might guess from my address (aa145) I was involved

with FreeNet very early on - from 1993 until about 2000. I remember sitting with committees designing the original brochures trying to describe what FreeNet was and why people should be interested. At the time, a dedicated high speed connection to the Internet was something only that Universities and large corporations could afford. Our brochures had to explain what the Internet was, how a bulletin board system worked, and the value of e-mails for keeping in touch. Keep in mind that at this time, web browsers did not yet exist, the Internet was a very difficult place to navigate.

“We did information sessions to explain to groups and organizations what a FreeNet was, even went out to senior centres to do training. We soon found that the first part of the training was showing the seniors how to use a computer, and then how to use FreeNet and e-mail!

“The original board of directors was created when FreeNet was incorporated in 1992. This original board of directors included people like Dave Sutherland (head of computing at Carleton University at that time), and Warren Thorngate and several others whose names escape me at the moment.

“I was on the first elected board of directors for the FreeNet. I soon took on the Treasurer role, wrote the database that tracked member donations, and also led the hiring committees for the first office manager and first Executive Director (Kyla Huckerby was the first employee - she managed all the volunteers that responded to membership requests and help desk queries). The first Executive Director we hired was Lisa Donnelly. Ian Allen was our first system administrator. Ian now works at Algonquin College.

“The early FreeNet board meetings were fully public and

would often draw crowds of people who were very passionate about FreeNet and had strong views about what direction it should take. These board meetings would last many hours as everyone, both board members and not, had their say!

“One of the early challenges with FreeNet was managing its revenue flow. We found that the majority of donations were occurring within a few months of the year, with far less occurring during the remainder of the year. So we implemented an annual renewal system for members, and staggered the renewals throughout the year so we could establish a more consistent and sustainable revenue stream. At one point, there were over 20,000 members registered with FreeNet.

“As time went on, there were great debates as to how FreeNet should evolve and how/if it should keep pace with more modern technology. Believe it or not, some board members at the time were not in favour of FreeNet offering a graphical interface! However in the end, it was decided this was needed, and a graphical interface was developed and offered in parallel with the FreePort text interface that it originally came with.

“There are many more stories but these are the ones that come to mind first. It is nice to see how FreeNet has evolved and remained relevant for so many users. Congratulations to you and all the others who are keeping the FreeNet fires burning!”

From *The Official FreeNet Survival Guide*, revised edition, April 1995: “What exactly is a FreeNet? The best way to understand the dynamic of a FreeNet is to think of it as a public space just like a city hall or a city park. It is an open place where individuals, organizations, and institutions can

interact and exchange information.

“How does FreeNet work? The heart of a FreeNet is a central computer network dedicated to storing and retrieving thousands of files of information and to relaying thousands of messages each day among community members and organizations.”

Jay Weston talked about how the FreeNet ended up separate from Carleton University, when it could have been prestigious for the university to run the FreeNet itself. “It would have been bad for the FreeNet. I take the position that if you let any organization control, you then they will cooperate with you as long as their goals and your goals never are in conflict, but inevitably they will be...The university was happy to be a partner, but they never wanted to run it. Robin 'Sparky' Farquhar [Carleton's President] was a very communitarian guy anyway, he always wanted to do things for the community, so he was very supportive, but there never was any suggestion that it would be a university initiative. It was the initiative of a few people who happened to be at the university. There was the convergence of different vectors is what it was. We couldn't have got along without Dave Sutherland.”

Dave Sutherland: “I recall a lunch I had with Mike Binder, ADM in Industry Canada in the autumn of 1992. He had heard about the FreeNet from some of his staff (Doug Hull, perhaps). I gave him a synopsis and he really got interested. I was told later that all he could talk about at the staff meeting that afternoon was the FreeNet. Industry Canada became one of our early substantive donors. A senior executive from Unitel recognized Mike at lunch. When we were introduced the executive said “You're going to ruin my business” (email charged by the byte). I replied, “I'm going to make you rich”.

We were both right.

“In the summer of 1994, I was appointed to the Information Highway Advisory Council formed by Industry Canada to look at a wide variety of emerging communications technologies including direct to home satellite broadcasting, cell phones, cable-telephone convergence and, just incidentally, the Internet. Council members included the presidents of Bell Canada, Rogers Cable, IBM Canada, Unitel, Videotron, Alliance Atlantis, Key Porter Books as well as others from civil society. One of the early meetings was held at the Communications Research Centre west of Ottawa. Andrew Patrick (of CRC), Gerri Sinclair (of MSN) and I demonstrated the FreeNet. The audience was blown away. The FreeNet demonstrated that the cost of technology had fallen so far that the expensive services which some of their companies sold could be offered essentially for free. We also showed off the Internet via Gopher and the Mosaic browser. This was the first time most had ever seen the Internet. As we browsed from site to site (primarily universities) all over the world, they wanted to know “who was paying for the phone calls?” and “who owns the network?” They couldn't believe that such an extensive network could be established essentially as a cooperative. While the Internet was not the primary focus of the first IHAC, it was central when the second council held its meetings just a couple of years later.”

## Chapter Two 41,000 Members



An early photo of the NCF help desk volunteers and staff.  
Front row: Ian Allen (green hat), Matthew Darwin  
Second row: Miranda Gray, Jessica Cohen, Pat Drummond

NCF was officially launched on 1 February 1993 with 1,000 members already on-line, using 20 phone lines. 100 new members a day were signing up. *The Ottawa Citizen* quoted Dave Sutherland as saying that he expected to have 10,000 members by a year later. This turned out to be a serious underestimate.

On 2 February 1994 *The Ottawa Citizen* reported that NCF had gone from two users to 16,000 in one year. It also stated the organization had 97 phone lines that were constantly in use, unable to meet the demand. With a design ratio of 100 users per line, NCF was looking to move to 160 lines as soon

as possible.

From *The Official FreeNet Survival Guide*, revised edition, April 1995: "As of March 1995, NCF has 96 lines available at the 564-3600 number, 64 lines at the 564-0808 number, and 9 lines at the 564-0670 number. When you dial any NCF number, the first tree line in the group will answer your call. However, there are now over 39,000 registered users plus a large number of guest users, all trying to use the same 169 lines. As a result, busy signals are inevitable at peak times."

Jim Elder was involved with NCF from just after it started and wrote many of the web applications still in use. He talks about the peak period for NCF in the mid-1990s:

"NCF's time in the limelight was short, maybe ending right around the time that Dave Sutherland was asked to join the Prime Minister's Advisory Council for the Information Highway. For a brief time people thought community networks like NCF might be the future; every city and town would have one, with people dialing in. No one (at NCF at least) envisioned services at NCF (such as 'search') someday being split off and served from some who-cares-where location to the entire globe. When the 'world wide web' appeared, NCF's board debated whether to allow members to use it: "If we give them an on-ramp to the 'information highway', won't they just leave town?"

"Maybe NCF is kind of like the vortex that forms and persists in water when a canoeist makes a stroke: The wings of progress flapped (once perhaps, enroute to California) in the vicinity of Ottawa and NCF formed, and persisted. Guys like me (aa456) were pulled in early by the vortex and helped it persist. I contributed by considerably expanding the features of the FreePort software."

From *The Official FreeNet Survival Guide*, revised edition, April 1995: "Using the Mail System: The National Capital FreeNet has an electronic mail (e-mail) system that can be used to keep you in touch with other computer users. You can exchange e-mail with any registered NCF user or with anyone who has an e-mail account linked to the Internet. Since 20 to 30 million computers worldwide are already connected via the Internet and since more than 150,000 are added every month, the potential usefulness of the e-mail system is enormous."

Andre Vellino recalls his early involvement with NCF and the mark that left:

"It began with my desire in the early 1990s to make some information about Buddhism and meditation available on the the NCF "menu" system. As I recall the page that I wanted was dumped into the category "Lifestyle and Entertainment" - perhaps not quite that, I don't fully recall. But it struck me as completely the wrong category, for one thing. But also it was 3 or 4 levels down from the main menu and hard to find.

"So I started exploring the "information organization" aspect of the whole menu system (to find a place for my page) and noticed that there were lots of other problems in lots of other places. The whole menu system was rather haphazard actually. So I went to a board meeting (to complain, basically) and met Jim Elder - who has since become one of my very best friends. He enrolled me into a "let's get together and fix this" committee and we did. The end result some 6 months later was a pretty navigable system and we had lots of tea and cookies and arguments about things in the process. It was great fun actually - and intellectually challenging too. Interestingly - I didn't know it at the time - I think this little

experience got my subconscious working because I am not a professor of Information Studies at the University of Ottawa (I now do this sort of thing for a living, in other words)!

“One thing led to another and I ended up on the board and becoming a VP for NCF. I think this ended shortly after I got married - I realized there were other things in life besides geeking out with internet nerds :-).

“My other significant contribution to NCF survives to this day: setting up the infrastructure for the portal system circa 2002-2003 as well as the new-user registration system on the existing web site. Quite a bit of that JSP / DB code has my fingerprints still on it - along with Richard Brunet and Jim Elder. It’s a testament to J2EE that this architecture has lasted so long without completely breaking.”

From *The Official FreeNet Survival Guide*, revised edition, April 1995: “When I use my modem with the NCF, do I have to worry about catching a computer virus? Absolutely not. It is not possible to transfer a computer virus (a program that will embed itself in your computer’s memory and do bad things) by simply reading mail, news, chatting, and so on. Even downloading your mail or another text file will not give you a virus. The only way that a virus can enter your computer is if you download an executable file (i.e. software) which is infected, and then run it.”

Chris Cope, NCF's second Executive Director explains how NCF ended up as “FreeNet” and not “Freenet”: “The early founders...I don't think really looked at the word 'free', because it came to them when they went to Case Western [University, home of Cleveland Freenet] and they were a freenet. There was a bit of a legal argument because we were using software that we got from Case Western ... called

FreePort and we called ourselves 'Freenet', as did they, and at some point, when [Cleveland Freenet]...ceased to exist and use the name 'Freenet', the beneficiary of the name tried to get [NCF] to pay for the right to use the name. That was about the time, right, wrong or otherwise, was when the "N" in the middle got capitalized."

The NCF board confirmed at its first meeting, held in December 1992, that the organization's name would be spelled with the "N" capitalized.

Jim Elder talks about how he heard about NCF and got involved with the board and organization:

"I learned about NCF from an article in the Ottawa Citizen. I had been swimming at Carleton with Shirley and was sitting in the lobby area. A copy of the Saturday Citizen was lying there, so I flipped through it. An article talked about Dave Sutherland's vision of an electronic network serving the community. I remember looking out through the windows at Carleton over the snowfields outside, thinking about how such a network could be used to enhance democratic processes. The article mentioned an information session would be held at City Hall, so I attended.

"I worked in 'hi-tech' so it was a natural; I used email, etc at work. This would be applying those technologies to improve our community.

"One thing led to another. I attended board meetings as an observer (as did many others). It was like attending a meeting of city hall; there were people with backgrounds from city council, the police dept, universities, religions, activists. Everyone wanted a piece and/or influence in this emerging, exciting new frontier. A land rush.

“I ran for the board in 1996. It was like running for public election. Candidates were asked to meet the public and participate in an on-stage debate at the main branch of the OPL (fortunately that was before easy video; I surprised/appalled myself at how horribly I performed on stage; good thing it was sparsely attended; I learn about a risk of winging things). There were 12 candidates for 5 seats and I came in second with 1507 votes (compare that to the 2014 AGM which had 122 voters and uncontested acclaimed candidates).

“I had a hand in making NCF’s elections boring; I invented the nomination committee. Not bad, eh, for a guy interested in ‘electronic democracy’. I might also have influenced MEC [Mountain Equipment Coop] to do the same. There are reasons for it, of course. Maybe it is part of why NCF outlasted its siblings.”

From *The Official FreeNet Survival Guide*, revised edition, April 1995: “What is the difference between the National Capital FreeNet and the Internet? Internet (short for International Network) refers to the connection of thousands of computer networks around the world. The NCF is just one of the many networks that make up the Internet. Think of the Internet as the Trans-Canada Highway and the FreeNet as one of the many cities connected by the highway. What differentiates NCF from other systems is that it allows free and equal access to the system. Before the booming of the FreeNet concept, access to electronic networks and information was extremely limited.”

Pat Drummond was an early FreeNet volunteer. She relates this story from the early days of the PC Users Special Interest Group, “Back when the "PC Users SIG" began there were

many people asking questions about home computers, so Matthew Darwin (Help Desk) asked me to take it on as a volunteer to answer questions. I talked to one of the SIG'ers on the phone to work out a problem more easily, and he blurted out "Oh, I thought you were a guy!" Then, "you must think I'm a real chauvinist". (I'd almost forgotten that word!) So he got my okay to take a poll online to ask if the SIG regulars thought I was a gal or a guy. Turned out about 50:50 but there was an interesting discussion about "Pat" - the person you never saw on SNL (Saturday Night Live). After this, I better understood the line "online no one knows if you're a fox or a dog". I cannot ever remember being harassed or bullied or bothered by trolls, the the advantage of having a no-gender name I guess."

John Rapp, Executive Director of the Dovercourt Recreation Association that runs the Dovercourt Recreation Centre recalls that organization's early association with NCF:

"It all begins [about 1996] with my mother in law (as the best stories often do!). She was an administrator at the University of Ottawa, and their department was upgrading their computers, and had about 20 computers and monitors available for donation to a worthy organization. She thought Dovercourt might be it. As Westboro is a very tech savvy neighbourhood, I thought it would be easy to find some help to set up a free computer drop in room with access to the internet. This turned out to be so, but not because of the many Nortel people, but rather a chance meeting with a FreeNet activist who offered to get the room set up and connected, and help keep it in shape. We rolled for about a year, with the usual ups and downs and some adventures with young users enjoying the challenge of messing up settings or taking us places public internet sites really shouldn't go, but throughout, our FreeNet warriors engaged

in a battle of wits and skill and kept us going.

“During the ice storm [in January 1998], we made a connection with Rogers to provide videotapes for our growing overnight population, and at the end of that time nurtured that relationship into being a host location for their launch of the "Rogers at home" internet service, which blossomed into their sponsorship of our internet activity and the creation of the four station more state of the art computers in our main lobby. That sponsorship continued for some years, but has recently been taken over by Neolore networks who look after the stations, connectivity, and the free hotspot at Dovercourt. Notably that hotspot wifi connection has been in place for over 5 years, and we were the first community centre to provide it, never mind all the press the City is getting now for their "new" initiative!

“While the arrival of Rogers with great computers and cable connection marked the end of our time with FreeNet, they were the pioneers that allowed us to be the first community centre in Ottawa to offer free computer stations and internet access, and we remain very grateful.”

The book *Freenet For The Fun Of It*, provides a detailed profile of 1995 of NCF's first system administrator, the always colorful Ian Allen:

“Ian D. Allen is freenet’s first and only superstar. Putting aside the fact that toothpick thin Ian reminds one of a recently rescued Gilligan, National Capital FreeNet’s systems operator is the grease that keeps things mobile among its 41,000 on-line members.

“Odd that it was because of his interest in the theatre that this dedicated vegetarian first ventured into the world of

computers twenty years ago when they put their theatre scripts on-line.

“He got his first timesharing account with email as idallen on the University of Waterloo Honeywell 6050 computer in about 1975, followed shortly by a Unix Version 6 account on their PDP-11. Ian has actually been reading Usenet news since it started flowing into the University of Waterloo in the late 70s, and has been on the Internet via Unix machines since Waterloo first got connected in the early 80s.

“Today, the bearded Allen is quick to admit that he has little time for on-line life outside of the NCF domain. But “I like being able to stay in touch with people no matter where they are or I am.” He's also a big proponent of the no-pay-to-play FreeNet formula. “I dislike people who want to charge me by the byte for what I send,” he said.

“Freenet regulars will know that he's usually quick to help out on-liners in need of a hand. “I like helping others find their voice on the net” though he dislikes “people who try to be my parent by telling me what I can and cannot read.” Self-possessed would-be censors take note.

“For Allen, a benefit of working in a virtual society is that he controls his own workspace. “I like being able to work from home, or anywhere else”, he said. “I relax by doing little programming projects, similar to the kinds of things you find in my NCF ToolBox.” In other words, he's never far from an active keyboard.

“Allen believes that the emergence of the Internet as a cultural phenomenon has empowered the average Joe: “The last time most of us got to stand up in public and tell a bunch of listeners what we thought was some public speaking

assignment in high school. Some of us got published in letters to the editor. Outside that experience, we relied on the media to tell us what was going on with each other. The net gives us the ability to talk to each other without the censors interfering. Suddenly, we don't need media. We can know, directly.

"I would hope the media would be fascinated with this, just as horse and buggy manufacturers might be fascinated by motor cars", said Allen. But he has a warning for the neophyte net surfer: "There is so much junk out there now that I don't really care for it. The Internet as a unindexed anarchistic entity doesn't scale well. Usenet used to be a small community of somewhat educated and mostly friendly intellectuals. Now that everyone is on the Net, any established news group becomes a zoo. Even here on NCF, the Youth SIG grew past the point where everyone felt comfortable."

"Past a certain point, more isn't better," notes Ian D. Allen. "We need to establish online community, and probably not through online bureaucracies with tens of thousands of users."

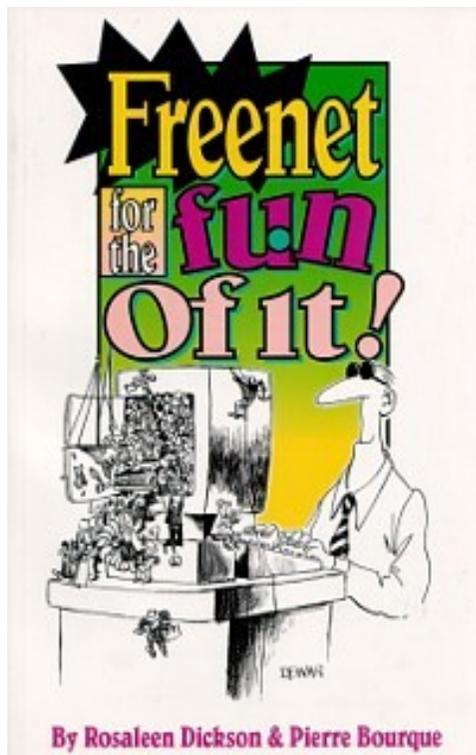
## Chapter Three Growth and Community

On 15 December 1994 Netscape released its Navigator 1.0 web browser. Its final release, before its demise, was Navigator 9.0.0.6 on 1 March 2008.

From *Freenet For The Fun Of It, 1995*: “But why, you might wonder, would people use computer mediated communication to converse when all they need to do is pick up a phone? Here’s why.

When you have a thought to share, that’s the time to express it. It might not be convenient for you to wait until your friend is home, or able to chat on the phone. So you send him electronic mail, called email. Then, after he’s read your note, and had time to think about it, he can sit down and send his answer. It’s a whole new way of talking things over.

It’s the gentle art of letter writing, back in a modern form. And there’s more. You can also send email to Australia, Halifax, Florida, and get an answer in minutes. And that’s still not all. That’s only the beginning. Thoughts are expressed, ideas presented, opinions can be improved, minds expanded. Is it worth



exploring? You won't know until you try, so let's get going."

Microsoft released its first version of their Internet Explorer web browser on 16 August 1995.

NCF tried to provide advice to newcomers on how to behave on line. From *Freenet For The Fun Of It, 1995*: "Netiquette Means Decency".

"Those who've been communicating by computer over the years have built up a number of traditions called Netiquette, not to be trivialized. Most Net troubles result from someone's disregard for Netiquette. Take pride in following these dos, don'ts and safety measures.

## DO

- Always be polite and considerate.
- Use the best language, grammar, spelling etc. you can.
- Think before you write; write what you mean - clearly.
- Smile while you write to keep a good attitude.
- Make your paragraphs short, never more than six lines.
- Leave a blank line between all your paragraphs.
- Edit out all but the part to which you reply in email.
- Edit out headers and signatures when you're replying.
- Lurk before you post. (i.e. test the waters)

## DON'T

- Write anything you wouldn't say to a person's face.
- Pick apart someone's message, bicker or aggravate.
- Make noise i.e. send one message to many

newsgroups.

- Post personal messages to newsgroups.
- Forward or post personal mail you receive.
- Include the entire previous posting in a reply.

To avoid the consequences of anger:

- If angry, don't post. use smileys :-) so they'll smile too.
- People can't hear your tone of voice so sarcasm is out.
- SHOUTING (using all capital letters) is rude.
- Don't try to start a war on the Net. It could spill over.
- Flaming means being offensive. Don't.

Paul Tomblin remained NCF's Usenet News Administrator in 2014:

“For those who don't know, Usenet is a worldwide network of sites that exchange information and discussion, in the form of "posts" to "groups". In the early days of NCF, it was the way we handled almost all discussion on NCF, both on the worldwide Usenet and on local "NCF only" newsgroups that were not fed outside our system.

“Back in the very early 1990s, I worked for a company in Ottawa that was having financial troubles. Every quarter, the powers that be would huddle for a day, and then come out and announce a bunch of layoffs, usually around 20-30% of the work force. Like many people at the company, I'd become quite fond of email and usenet (to the point where I'd taken over day to day running of our company's Usenet server). Just a few days before we were due for another round of layoffs, there was an article in the paper about the initial pilot project of NCF. I printed out an application form - while waiting for it at the company printer I saw I wasn't the only

person doing the same. While I wasn't laid off that round, I did attempt to establish an online identity that wouldn't be taken away from me if the company laid me off or folded. But I was hampered by in that attempt by the fact that the newsreader that came with the Cleveland Freenet software "nr" was horrible. It was extremely limited compared to the "trn" software I was using at my company (and still use, to this day), and it was also extremely buggy. At first I used my "programmer hat" and submitted bug fixes to the "nr" newsreader.

“Aside to the C programmers out there: One of the worst bugs was that they used "sprintf" in several places to copy stuff from one string to another instead of “strcpy”. This means that if you had a message with a subject line that had a "%s" in it, for instance, nr would crash looking for the missing third argument. The whole thing looked like it had been written by a very junior programmer, probably a first year student - and indeed, knowing the history of Cleveland Freenet, it probably had.

“After abandoning the attempt to turn nr into something usable, in part because the task was too daunting and in part because other people seemed to be doing the same thing, I started on a different approach - I tried to hack vim and trn to take out all the "dangerous" stuff like shell escapes and reading files from outside your own home directory, in order to get them offered as choices for other NCF users. I finished that project fairly quickly, but I couldn't get anybody to agree to add them to the settings menu. I don't know if anybody actually reviewed what I did. Since I could see it wasn't going anywhere, I contented myself with using them from my "test" menu and stopped pushing people to approve it.

“Meanwhile, I took my knowledge of running the back end of

a Usenet news system and started taking over the duties as NCF's news administrator, as John Stewart was finding it a bit much running both his own Carleton U system and NCFs. I offered to upgrade the version of INN that was running. I think the one that was being run was one that had come from the Cleveland system, and it was horribly out of date. I had to hack the new version to enforce NCF's "real names" policy (sort of like Google Plus today, NCF didn't want you posting under an alias), mostly by throwing out whatever "From" line you provided and create a new one based on your login id, but other than that the upgrade was straight forwards and saved a lot of administrative effort.

“In the early days NCF's resources were barely adequate to handle the quantity of Usenet news that was flowing. INN (like most Usenet server software at the time) only had one tool to manage your disk usage - expiry times. You could control how many days articles were kept, usually at a high level but if wanted to you could go down to the individual newsgroup at adjust it per newsgroup. Since we had 11,000+ newsgroups, that obviously wasn't going to be easy.

“I had to do a lot of micro-managing of the expiration times on different newsgroups, trying to balance out the desire to keep popular groups long enough that people could follow conversations even if they didn't read every day but keeping groups that got a lot of posts from filling up our news spool space. It involved a lot of checking the sizes of individual newsgroups on the spool and comparing it with the number of NCF users who were reading it as well as making judgement calls on the closeness of the group's purpose with the NCF mission. For example, I tried to give precedence to Canadian newsgroups and world-wide groups over US or European regional groups, and serious groups over fun ones. In retrospect, that may have been a mistake because these

days the serious ones are all dying on the vine and some of the fun ones are still going.

“As well, there was a desire to maintain a bare minimum of posts in NCF's own newsgroups, even ones that rarely got posts, in order to avoid the "empty store in the shopping mall" syndrome. For this, I was aided by a program written by Jim Elder which looked in the NCF local groups and adjusted their expiration time based on how many posts there were in the group. I'm still running that program today.

“My biggest problems with running NCF's Usenet system came with the rise of spam. There was an NCF member who thought the best way to promote his weird and completely unworkable economic system was to annoy the hell out of as many Usenet users in the world as possible, generally by gigantically cross posted spam, which of course would cause other Usenet users to complain to their sysadmins who would then complain to me, threatening to cut off NCF's access to Usenet entirely. NCF had a "Complaints Resolution Committee" (CRC) and generally they never responded to my pleas for help and never supported me in my efforts to stop this NCF spammer until I threatened to quit and just let the outer Usenet community drop NCF's Usenet posts into a black hole. Instead I was caught between a rock and a hard place where I'd get complaints from the outside world, try to curtail the spammer in order to safeguard NCF's continued access to the outside world, and then get the CRC and the BoD of NCF mad at me for taking action. Eventually the CRC did listen to me and allow me to put some restrictions on this person, but not enough restrictions to keep outer Usenet happy.

“As an aside, this spammer also dreamed up a vast conspiracy where I somehow also was responsible for

deleting his email (something I never had the power to do, no matter how much I might have liked to do so) and he accused me of being in cahoots with a woman who at the time I loathed, because of something entirely unrelated. The chances of me conspiring with her on anything were about the same as my chances of running for parliament on his insane economic plan. Last I checked, although the spammer has left NCF, he's still promulgating both his economic plan and this conspiracy theory where somehow I deprived him of his email.

“Also as a result of the rise of spam, several of the Ottawa area Usenet sites formed ONAG, the Ottawa News Administrator Group, in order to cooperate on the running of the ott.\* (Ottawa regional) Usenet newsgroups and to provide a common front against spam and other abuse. As NCF was one of the biggest Usenet sites in Ottawa, I was quite active in the group.

“After upgrading NCF's INN, other than dealing with the complaints about spam, the Usenet system became remarkably self-maintaining. I moved from Ottawa to Akron, Ohio and then to Rochester, New York in the late 1990s, where I live to this day. I still log into the NCF system every week or so to check if things are running ok, and I read the ncf.admin and some other newsgroups everyday to check if anybody is having problems. I run another Usenet site on my own hardware here in Rochester, where I peer with many sites in outer Usenet. This has been extremely beneficial to NCF, because some years ago NCF's only other connection to the outside world, Carleton University, stopped carrying Usenet and so now a feed from my own server to NCF is the only way news gets in. Also, due to the general decline in the number of people using Usenet and the number of sites carrying it, ONAG is defunct. As far as I know, NCF is now

the only Usenet site left on Ottawa.

“The hardware that the Usenet server runs on was getting increasingly decrepit and a number of years ago [NCF system administrator] Andre Dalle asked me to help to migrate it to newer hardware. I tried, but I had a number of technical issues and never got it migrated to my satisfaction. As far as I know, it's either still on the original hardware or it's running as a virtual machine emulating that original hardware on a newer machine. I keep meaning to look into that, but I've got too many other things on the go.

“I'm sad that people these days seem to like web forums better than they like Usenet. I never quite understood that - Usenet brings the world to you, whereas web forums make you go out to them. On a daily basis, on Usenet I read discussions of kayaking, piloting small planes, history, urban legends and other topics. If I wanted to do that on web forums, I'd have to visit 5 or 6 different web forums, manage sign ins for each of them, learn their different user interface, etc. With Usenet I have one login, and all the different newsgroups I use have the same user interface. And if I don't like the user interface, I can switch to a different newsreader.

“But I see the writing on the wall, and I suspect it won't be long until Usenet is completely dead. When that happens, I'll shed a quiet tear and go back to whatever the web forum of the day is and hope their next user interface change isn't as bad as the last one.”

Google was originally founded by Larry Page and Sergey Brin while they were Stanford University Ph.D. students. They incorporated the company on 4 September 1998.

Chris Cope became NCF's second executive director in June

1997, replacing Lisa Donnelly in that capacity. Chris was responsible for hiring Andre Dalle, NCF's long-serving system administrator, hired in 1998. He also presided over the decision to move from text-only services in 2000 and move to the web. He says, "that was a fairly long process and it is still going on to some extent today... There were some interesting debates going on at the time, debates that couldn't occur today, like 'do we really need pictures, surely we can communicate without pictures. That's just silly. Let's provide ten minute time frames and let people get their pictures and use a POP connection.' These were sometimes very passionate and very heated debates amongst the then current board and interested by-standers. FreeNet at that time was a much different thing than it is now, it really was a significant community unto itself. Now it is not such a community as the internet has become the community and communities within the community."

Apple released the first version of OS X on 24 March 2001. Mac OS X v10.0 was codenamed Cheetah and started a long tradition of cat-named operating systems for the company.

Chris Cope describes how the organization was quite different in this period than it is today, "there was a community of FreeNet members and they were using the tool to communicate with each other and find each other. News groups were commonly used and used readily by just about everybody and not yet full of spam, that kind of thing.

"The organization itself was really all about free unfettered communication, so the 'free' in "FreeNet" really didn't have to do with price, but it happened to be no cost as well, or at least by donation. Really the concept of free speech, or free ability to freely communicate with others, unfettered, uncontrolled was more than a soapbox. It was an

organization with tremendous 'stickiness', people to each other, like-minded people. It was really a much different thing than it is now. It is harder to describe, because, yes, it is a service provider, but it is something more than a so-called 'poor-man's service provider' because it still is providing an introduction to the internet to people, it's helping folks with their computers, with their problems and their use of the internet, that whole 'how-to' function, [which is] in many cases a pretty huge barrier. The volunteers and staff at FreeNet are performing a pretty huge role and that is something that doesn't occur with commercial ISPs and it takes us kind of outside the role of 'service provision'. Because there is this other aspect, FreeNet still has members, the 'members helping members' thing, we're not customers."

Chris Cope talks about the digital divide and attempts to address that issue: "In about 2000 we were struggling financially. Donations were not quite covering costs, costs were increasing. Membership was at one time apparently robust, as high as 30,000, but it wasn't real. The 30,000 people didn't log in every day and the reality is that the membership was probably about 5-6000 of actual users. So we introduced a variety of programs, one of which was the renewal program. So even though we weren't saying anything in the renewal program about money, we asked you for a donation when we renewed you, but it also allowed us to clean house a little bit, so that the users who weren't there anymore, who were long gone, didn't renew. It wasn't a case of us throwing them out, they simply didn't renew. Those got archived and we put some mechanisms in place where we could un-archive them ... trying to be as flexible as we could ... but a combination of that and introducing a more frequent 'ask for money' as part of the renewal and as part of other things ultimately put us back in a little less fragile condition financially, but still fairly fragile ... I found that we

were looking outward at people who didn't have internet or didn't know how to have the internet or couldn't afford the internet, or all of the above, all of those various barriers in there. Two agencies of the federal government were also looking at that. Human Resources Canada and Industry Canada and a subset of Industry Canada, put out a program called VolNet .... They were all looking at this issue and the buzz-word 'digital divide' had suddenly become a reality and they were looking at how the internet was providing something valuable in people's lives, but not everybody could get it. They were trying to figure out other ways of trying to resolve this and the people who can't get it, why not?"

"During this period of time I had already been making connections with senior bureaucrats ... in these various agencies and looking for things that FreeNet expertise could be applied to for money, because I was concerned that we didn't have enough. And so we found two or three projects in that period of time, possibly three ... We found that without requiring anything beyond the Deputy Minister's signature they could provide a grant of up to \$25,000, so we had a number of \$24,900 projects (laughs), but we had to work for them and we had to find the volunteers or in my case, paid staff ... and we would actually get out and find out stuff, so this may be a case of literature review, it could be a case of interviews, it could be a case of a focus group or a whole bunch of the above. Ultimately we provided to our payers, the government agencies, we provided them with some reports which expressed the opinion of our organization, based on the facts of our findings ... they were quite well received. I don't know if they helped to resolve it or not. We weren't alone, these organizations were getting other similar groups to try to provide them with some findings and opinions ... as they tried to find ways of resolving this problem for Canada, not just Ottawa or not just FreeNet. It was a period of time

that was helpful for us.

“In most of these things my salary was already being paid, so if I chose to dedicate, or if the organization chose to dedicate, a piece of me for a period of time that would be straight to the bottom line, if it got paid for by Industry Canada. We had to outsource a few things ... but we found that we were able to make about \$10,000 that went straight to the bottom line on each of them. We had out-of-pocket expenses as well, which was the other \$15,000, but with three of these things, that \$30,000 was badly-needed money. We were able, however, during this period of time, to maintain our integrity, which actually was a strong piece of importance that we didn't have to compromise any of our integrity, we didn't have to stop our main programs, we didn't have to do anything differently and the word that might have been used in board meetings, 'prostitute ourselves' simply to get the money from the government .... This money was coming in, it was maybe saving the day ... but it wasn't going to happen forever. I managed to get through a couple of processes, though, because I managed to get a couple of larger projects after that ... Maybe the one that I am most proud of is a project that was called VolNet.”

Chris Cope describes NCF's role in VolNet:

“This was a program that Industry Canada wanted to bring the internet technology into the hands of not-for-profit corporations and in particular charities .... They were looking for some delivery agents, basically in every city in Canada ... that had a knowledge of the technology, knowledge of the not-for-profit community and we didn't have that exactly. I was able to get together with the woman who was the then current executive director of Volunteer Ottawa and we formed a partnership. They knew the not-for-profit sector and the

charitable sector, we knew the technology and we could provide the services needed, including webhosting and mail hosting .... So in the end we came to an agreement and we submitted a joint proposal to Industry Canada and received a VolNet grant which was, as I recall, \$250,000 ... and awful lot of it was paid on hiring people to do stuff, because we ultimately put it into, as I recall, about 240 not-for-profit agencies. They received a computer, which was subsidized by the government, so it came through a government source. It was interesting too, because the price was huge. I think they got a \$1500 computer for \$700 or something like that and it was a \$700 computer that today you could buy for about \$40 (laughs). However at that time it was an enabler. We would basically deliver it. We had people who would do this on our behalf. Most of these people were paid on a "piece rate" and they would deliver it, they would hook it up, they would make sure the connections were in place back to FreeNet. They would then sit down and provide training for the individuals and the organization on how to do it ... We left them basically working on the internet, whereas before they weren't."

"One of the interesting things is that in the early days we had done a fairly informal focus group, but we had done it to make sure that we were giving them what they needed. Industry Canada had also done some similar things and the one thing they discovered that they didn't need any help with was web page development and putting up a website .... We found that invariably within about two months of learning the computer, teaching them how to use it we had somebody on the phone saying 'can you help me with my web page?' (laughs) We were learning this too. The internet was so new at this time that people even then were thinking of the web page as basically a business card out in this ether. They weren't thinking of some things that they could use a web page for, or

web presses for. They were very static pages. We ran some seminars and looked after that as well.”

23 September 2002 saw the first release of Mozilla's Firefox browser, originally called Phoenix, which put much of the old Netscape code back into use.

Chris Cope talks about FreeNet's role in CAP:

“FreeNet had a pretty strong connection [through] Industry Canada and Human Resources Canada ... to CAP ... the Community Access Program which was a program where they would provide computers in public spaces. So we worked with the organizers of CAP and there were a lot of partners in those, up to and including the library and others. We basically provided some back end for this. They needed places for mail, they needed places for accounts that kind of stuff. We were able to delegate authority to the libraries at least, so they could be part of our authentication process, because being authenticated is near and dear to our heart. It always has been and probably always will be. Having a provision where we could have a trusted agent doing some of that for us made it convenient for the member and just as reliable for us. We got involved involved in the Community Access Program during that era as well and that did a lot of good. Our needs fell away from that as they were on their own feet ... so I fell away from it because I was kind of the principle connection between it. It is too bad in the end that ultimately Industry Canada kind of cast it adrift as it is gradually dwindling. There are very few left.”

“[The Community Access Program] ... was a fairly large program for us and more importantly, it was one of the programs that introduced me to nearly all the pieces of a soon-to-be partnership to work with OCRI (the 'Ottawa

Carleton Research Institute', now called 'Invest Ottawa') on the SmartCapital project ... it would be probably starting in about 2000 and extending past my stay there ... it might have even have been 1999 .... Industry Canada basically put out a contest in each province, so each province could have one winner, so a community in each province could be awarded a \$5,000,000 grant to do something pretty darn special, taking advantage of this new thing, called the internet (laughs). Where the criteria for doing this thing ... projects that would improve the quality of life, that would have some real substance to them.

“So OCRI took lead on the application for the community of Ottawa, in this case the City of Ottawa, which was also involved as a partner ... but only one of many partners. In the end there were 40 partners. Because I had been connecting with all the bits in this, I was ultimately able to connect with OCRI and we had two of the 40 projects.

“I was also in the process of trying to make one of those projects happen as well; this was our 'thin client' project. So in the end we were ultimately able to use SmartCapital. Again we were looking at maintaining a sense of integrity here, because we didn't want to be beholden to the government, nor did we want to rely on this money, but we thought there would be a very interesting opportunity to have our project work, in addition to paying for itself and maybe a little extra, but also leave us some legacy ... The legacy we thought we would aim for were servers and services and it happened that we got a little bit of both. For example our present web page was built with money that came out of one of those projects. We have servers that may still be on the racks, but this was a long time ago, so I don't know if they are still there or not. They were bought, fairly robust servers, particularly by our standards, we were always trying to economize and do things

as inexpensively as we can. So these were robust servers that we chose what we wanted, as opposed to what we could afford, to produce the backend for these things.

“I negotiated with many, many organizations which donated to us. That included with Microsoft who I was negotiated through an Ottawa agent, right with Redmond, because we needed a 96-place ... NT licence for the servers and they also gave us office suites, current office suites. I had Corel and I had Adobe, so FreeNet members could log in and have access to modern, or at least then-current modern software and it really wasn't all that successful. We thought it would be terrific because we would offer this, but the reality is if you are going to do something, you get used to software, you want to own it or be able to have reliable use of it. Software-as-a-service wasn't yet really known. Things like Google tools weren't really there and this was in some ways like that. So we were a little bit ahead of our time. We even got Citrix ... It's interesting, because the Citrix server and the Citrix process was really only doing a screen scrape, so the real horsepower had to be at the server level. So you are running Adobe Photoshop there, you could have a very modest computer out on the end and you were basically just providing instructions via dial-up to the robust server, that did whatever you told it to. Then it would basically scrape the screen and bring it back to show you the picture. It would create a web page, or even a document, like a word document, you could be going on there and you didn't need the computing horsepower to do the work function, because it was a pretty fat piece of software. All you really needed to do was type what you were typing and with dial-up it was a bit odd because you would be typing and it would be appearing on your screen some time later. So that was quite odd (laughs). Citrix software really is a thin client software, so your own computer really is a terminal. Which isn't a whole lot

different than some of the things that are going on now, except that you have some computing horsepower at the client level, too ... It was an interesting experiment, an important part of the process.”

Chris Cope explains how NCF did away with the Executive Director's position for a short while, starting on 21 November 2000:

“[The NCF Board] choose to terminate the position as my contract was at an end, which allowed it to happen, but they wouldn't entertain thoughts of a renewal of my contract and that was fine by me. I was actually re-employed within a few weeks by OCRI, the people I had met through this whole process. I actually ended up working on some of the same projects and interfacing backwards to FreeNet, because they had some pieces of this project. I had, at that moment in time when I left, there were approximately a million dollars worth of contracts that were outstanding, they were in play. The board, the then current board, had really limited understanding of what it would take to bring those contracts off. So they chose to get rid of the position and there was a little bit of a 'doom and gloom' attitude around the board table and they thought this was really the only way ... [I] had been the executive director, had a whole lot of stuff coming. Some people might think I had saved the day, by getting enough money to keep us alive and keep the doors open. I left them a legacy, some ongoing contracts that were all quite profitable, but that they also had obligations to deliver ... Jim [Elder], who was quite knowledgeable about these things and he was no longer a board member at this point point, he was definitely in the camp of 'Friends of FreeNet'. He got the board together through several facilitated meetings ... to bring them through and did a fair bit of work on it and research to find out what the heck we had to do, what the heck was going on ... and

ultimately had the board go through a little bit of soul-searching ... and they realized that perhaps they had made a mistake, that 'we can't really do this. We don't know how to do this' ... They actually wanted to do it with volunteers doing the work ... volunteer management and volunteer front line [workers] too, the whole thing. It is pretty tough in a million-dollar organization with some of the contracts that we had to deliver on and had some obligations on ... Jim was successful ultimately in having them come to some of the conclusions that he had hoped they would come to and he is a bit of a master at this ... So in the end they decided 'I guess we made a mistake and we probably should have renewed [my] contract and so they made me an offer. But by this time, time had passed and I was enjoying what I was doing at OCRI and things were fine and ... I was also a little annoyed. (laughs)”

Chris Cope didn't take the job back, instead it went to NCF's third Executive Director, Ian MacEachern, who was hired on 9 April 2001. Instead, at Jim Elder's suggestion, to provide some corporate memory and continuity, Chris Cope ran for the Board of Directors and became the organization's President, a position he went on to hold until 2013.

Microsoft first released Windows XP on 24 August 2001. It went on to become an enormous success for the company. It became the most widely used operating system peaking at 76.1% market share in January 2007.

Chris Cope discusses how the NCF Board nomination process was changed:

“One of the next important things that happened to FreeNet, during that period of time ... [was that] we thought it more appropriate for an organization such as ours to have a

nominating committee to vet the candidates that would be running for the board, at least those that the board would endorse the nominations of... We came up with this scheme and we put in place the need for an *ad hoc* nominating committee each year to actually make some effort in terms of looking at any possible candidates, even going out to see if there were candidates with talent that would be a useful addition to the board chemistry. We began to do that and we have been doing that ever since and I think our board has been strong ever since .... We get rid of this business of a 'popularity contest' and so we get rid of the bridge club or tennis club type board and we get into some people who accept their fiduciary responsibility to run a corporation, which is FreeNet, on behalf of the members .... I think it has been a significant change in attitude over the years and not overnight. It's a culture change.”

On 7 January 2003 Apple released the first version of its Safari web browser.

Jim Elder talks about this period at NCF:

“Events I was part of in later years includes inventing the membership renewal process with Chris Cope, mediating after the ED firing and board crisis of 1999/2000, spearheading the ‘make something good of it’ use of Smart Capital funding of 2003, helping with the intro of DSL in 2005, detecting and helping NCF pull out of a deathward dive in 2010, and then these days, ‘how to share the cost of usage’. The SmartCapital days were fun for me, working with friends John Selwyn, Andre Vellino, Shirley, and others to modernize NCF. It was great being on Carleton’s campus daily, using the fitness facilities, bumming office space (one of John’s talents), some with with fabulous views.

“There’s certainly a theme of disappointment and disillusionment in my rear-view look at NCF, which I think is fair as a big picture retrospective on things (which I tend to frame in comparison to California and my other-lives corporate experiences). However, from a personal and local community perspective, there’s been a lot of fun, learning, camaraderie, satisfaction, pride, new friends, cool stuff, challenge, oddness, and entertainment for me associated with NCF. NCF did/does some good work, is still here, gets lots of donations and support, has lots of members. NCF gave me lots to think about, and experience on its sometimes unruly board (where people often used Roberts Rules with skill) ended up helping me later on corporate boards.

“Over the two decades I had endless, innumerable meetings with EDs and boards. Though I realized only lately (2014), talking with Tony [McNeill], that in the early days there seems to have been perhaps three largely-independent spheres of activity relating to NCF: The Intangible Economy (of which Tony was part; Dave Sutherland on the Prime Minister’s committee; Garth Graham), academia (guys like Warren Thorngate, Jay Weston), and the Tangible Economy (volunteers, executive director, board members, members, me) ....The first two groups were at NCF only fleetingly, like hummingbirds at flowers. Of course they were crucial to NCF – they had the idea, they obtained the founding grants, and they made it happen. Also, later, Chris Cope obtained grants (the HRDC and SmartCapital grants in the early 2000s) that allowed NCF to modernize (become web based).

“I can’t remember how many ED [executive director] search committees and other committees I’ve been part of.

“The board used to go to a pub after board meetings; I thought that was good. That was back when the meetings

were at City Hall (the city thought NCF was that valuable) and pubs were near by ... It's been good; I'm a 'friend of NCF'."

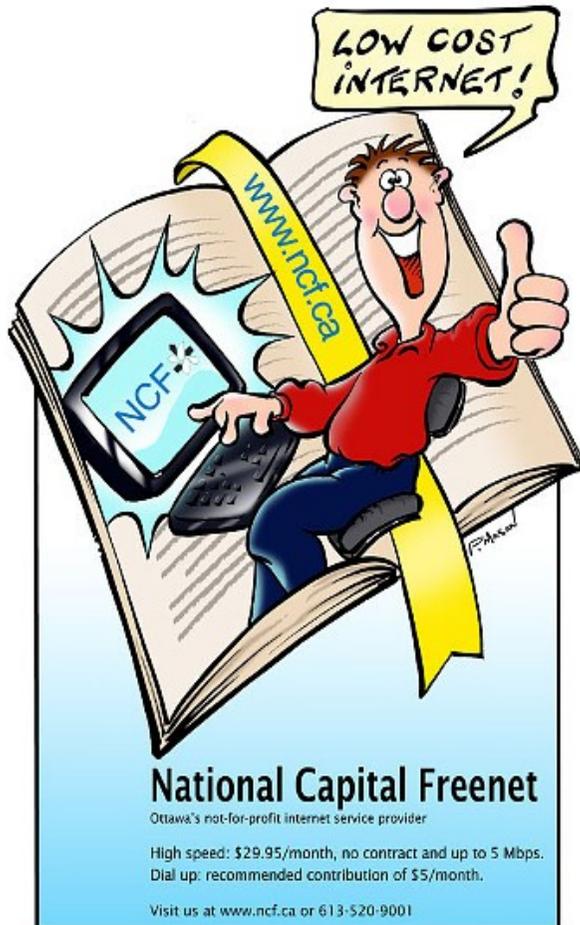
Wikipedia was launched on the internet on January 15, 2001 by Jimmy Wales and Larry Sanger.

NCF executive Director 2013-14 Tony McNeill, discussed the effect of NCF on the local political scene, "Alex Munter ran his political campaign off FreeNet ... That was pretty forward thinking way back then, pretty radical at the time. Who would think to do that? He thought of it and did it...There were some pretty significant things that happened on FreeNet."

Chris Cope talks about the donation based aspect of NCF: "It was during my time as Executive Director that we invented the euphemism 'mandatory donation' (laughs), sort of behind closed doors, I don't think we ever put that into print. We wanted to make it as difficult not to donate as we could, because we really needed it to stay alive. As we moved over time in the period after I was Executive Director, moved to high-speed, there was no choice, we had to go with a fee for that. However, having said that, the people who are paying the fees are still, in many cases, donors [as well] ... it's interesting, there is still a very strong sense I think of identity to a core cadre and out a few degrees of separation from that, of people who want to be part of something, they want to be part of a community organization. [That is] some of the success of places like Mountain Equipment Coop. There are a lot of similarities. We are not structured as a coop, but our nature is cooperative."

## Chapter Four DSL High Speed Internet

In the early 2000s the internet grew very quickly spurred by the wide deployment of high-speed access. New services, like video sharing became viable. NCF stuck to providing dial-up access only and its membership shrunk quickly as people switched to high-speed DSL and cable service as it became available across Ottawa and Hull.



Facebook was founded on 4 February 2004

by Harvard University students Mark Zuckerberg, Eduardo Saverin, Andrew McCollum, Dustin Moskovitz and Chris Hughes.

On 20 October 2004 the first version of Ubuntu was released by Mark Shuttleworth and called Ubuntu 4.10 "Warty Warthog", due to the rough state that first release was in. Over time it has become very refined and today NCF uses Ubuntu to run its servers and office desktops.

Chris Cope talks about the failure of FreeNet to see the coming of highspeed and how the organization lost a lot of its membership base. "It had to do with coming out of a culture of the free, unfettered ability to communicate with each other, we didn't see this business that graphics were particularly needed, so 'who cares about highspeed?' We could type email to each other all until the cows come home .... I think that there wasn't general understanding of what might happen in the world as the internet was becoming a reality in our lives. So we missed that change and the world passed us and you know we are still maybe playing catch-up to a very large degree ... I think this was really a failure to really grasp what we had by the tail."

YouTube was started by three former PayPal employees in February 2005 and was bought out by Google in late 2006.

Twitter was started in March 2006 by Jack Dorsey, Evan Williams, Biz Stone and Noah Glass and was first launched in July 2006. It quickly became popular and had 500 million users by 2012, posting 340 million tweets per day.

Speaking about this period and the impacts the internet was having, NCF Executive Director during 2013-14 Tony McNeill said: "[In] the music industry what it has given is the rise to small independent bands, not under control of the record labels, that can publish their own music. I can publish my ideas, I can publish my own creative works, whatever that is .... A local band can have success and take off, because

they are now able to publish their own music.”

Microsoft first released Windows Vista on 8 November 2006, although it never matched the sales success of Windows XP.

On 2 September 2008 Google launched their first version of their Chrome browser which went on by September 2012 to be come the most popular internet browser worldwide.

Chris Cope talks about the value of an NCF email address. “Something we haven't done much in terms of exploiting ... and we should probably pat ourselves on the back more around this, is one of the things about our FreeNet email address ... Our paying attention to authentication [of individuals] makes it a reliable address and is associated with you, the person, not with you, the person who is employed by 'Joe Blow'. So it's not your company, it's you. A number of FreeNet accounts, and we have a couple of thousand members who don't use us for connectivity, and I would think that is one of the things that they are using us for, to give themselves a permanent email address that is reliable. It's not looked upon as a Gmail or a Hotmail [account] or something like that, where you can get one without authenticating .... You are are receiving something that can be relied upon.”

DuckDuckGo, the privacy-aware search engine that doesn't track its users, was founded by Gabriel Weinberg on 25 September 2008 in Valley Forge, Pennsylvania.

Microsoft first released Windows 7 on 22 July 2009 and it proved a worthy successor to Windows XP.

This story from NCF front desk volunteer Adam Hunt shows how NCF is different from the big ISPs, how it is often more

like a community service organization:

“One Friday in early 2014 I was on the front desk in the new NCF office on Richmond Road when a young woman came in and put a DSL modem on the desk. She looked distressed, The modem is not one we had sold, a different brand. I listened as she explained that she is an NCF member, a single mom, is on social assistance and has an opportunity to get a job she desperately needs. She was filling out the on-line job application form and getting ready to upload her resume, when her connection went dead. The only light on her modem was a red power light. She looked heartbroken. It was late on a Friday afternoon and she needed to have that application in before Monday morning to even have a chance.

“Another volunteer tested her modem and found that it had completely failed. He quickly offered to make her up a 'loaner modem' to get her through the weekend. I think to myself that is a good start, but while he programmed it, I am thinking that we can do better than that. I conferred with the staff, find the loaner modem listed in the hardware database and sell it to her for zero dollars, making it a gift. In a few minutes the loaner modem was ready to go. I tell her that the modem is hers to keep. She thanked us all profusely. I wished her a good weekend and she departed with a smile on her face.

“Our job is to get our members onto the internet, so that they can do whatever they need to do in life, like apply for jobs. Some of our members are in need and I'll do whatever has to be done to help them. I don't want people to walk out that door unhappy and I don't want them missing opportunities when we can do something about it.”

The Diaspora project to create a free software-based, disbursed, community owned, advertising free social network

was founded in 2010 by four students, Ilya Zhitomirskiy, Dan Grippi, Max Salzberg, and Raphael Sofaer, all students at New York University's Courant Institute of Mathematical Sciences.

Jim Elder sums up the “persistent themes at NCF are:

- NCF is a large group of people getting together to share costs, doing something good for themselves and community
- NCF helps make Ottawa a better place (to live)
- NCF benefits from many volunteers and donors, members-helping-members
- NCF is a local, not-for-profit alternative to commercial ISPs”

## Chapter Five

### The Future

Chris Cope talks about the future of NCF. “We have relevance challenge ... one of the future board members, when I was talking to him about FreeNet and this is a fellow who has taught at Carleton, taught at Sprott and their Technology Innovation Management Program. He asked me the same question he would ask budding entrepreneurs who are going through the schooling programs. He said, 'so let me think about this then. You tell me the three main challenges that FreeNet faces today'. This is something that we hadn't discussed at the board, so I wasn't giving him the company line, but the 'Chris Cope line' and it occurred to me that one of those things is 'relevance'. If we can't preserve ourselves as a relevant community organization then we become the poor man's ISP and we will probably get lost in the commodity war.”

“Ottawa probably has something in the order of 3500 not-for-profits or charities ... they have varying degrees of need. [The big ones] don't need us, but along the way some of the small and poor organizations may have needs and they may be struggling in today's internet world to preserve their position in whatever market they are catering to. Given that the market that they are catering to is providing service to humans, if we can facilitate that, there maybe an opportunity for us to be relevant for many, many years to come.”

“It is hard to really imagine the future of FreeNet because the internet has become a commodity and it is pretty hard to maintain a small, not-for-profit niche in the commodity business, so I think we need to continue to find our relevance in something that includes connectivity, but extends beyond

it. It will be in that side that is relevant to content or services or something there.

“Even in connectivity we need to preserve a niche, so for example ... customer service ... whenever the phone is ringing and not being answered we're hurting ourselves, because that is one of the significant differences ... People love to hate Rogers and love to hate Bell and one of the reasons for that is that when you call them up you and you don't talk to a human, or, if you talk to a human, he might be in India or wherever or a 'paid gun' who has a protocol on his screen in front of him and 90 seconds to pitch it. We can be different, because we have humans who are thinking about you ideally and we have an office with a counter. But if we start allowing that to slip and not deliver that service to everybody on a timely basis then I think we fall apart.”

## Chapter Six

### Summing Up NCF

Jay Weston assessed his early participation in NCF. “I think it was probably the single-most important thing I ever did .... It was fun, it was exciting and it had a lot of potential. It was great, great. I hated the board meetings, but then I generally hate meetings anyway ... I am amazed that it is still going.... Part of the reason that it is still going is that no other organization got to own it .... I think, my personal feeling about why it didn't die is the residual wildness of the internet that we all hoped for in the first place. I think that in its own little way it was the beginning of the social media. People had access and everybody has found their voice, much to the dismay of people who used to be the only voice in town, the media.”

Jay Weston indicated where some of the credit should go, “Another guy who I don't think got enough credit in all of this was Andrew Patrick. He worked his butt off in a day when nobody else knew what he was doing. He was out at Shirley's Bay with DOC [the federal Departmental of Communications] .”

Jay Weston said of NCF, “I always saw it as political action.”

Chris Cope summed up his time as NCF Executive Director between 1997 and 2000. “It was a major career change for me, a major turning point in my life and probably one of the best I have ever made, because it changed the focus of my life into something that was quite different. It involved me in technology when I really hadn't been deeply involved before. It took me in some directions that were quite new and also, through the process, I began meeting people and I'm a fairly gregarious character (laughs). So I began meeting some

people that came from a completely different world that was really interesting to me and probably very beneficial to my own career. That curve in my life, which was supported by the then current [board] hiring committee, I think was an important part of my career. It was a synergistic thing, because it was important for FreeNet, too. I think they needed me and I needed them. (laughs)

Dave Sutherland wrote: "I would like to acknowledge the contributions of the many people who contributed to the early success of the project. These include the founders who met for almost two years to bring the project to life. Jay Weston and George Frajkor from Carleton's School of Journalism started the whole thing rolling. June Hacker from Computing and Communications Services was a continuing inspiration to me. We felt that the project had a great potential for continuing education and as a complement to the university's existing educational television service so Robin Allardyce (School of Continuing Education) and Ross Mutton (Department of AV Services) joined the organizing committee. Tambræ Knapp from the university's Communications Services department provided valuable advice on the public relations aspect of the project. Rick Mount provided legal services, helping to formally establish the corporation and invaluable advice on the many issues that confronted us in the early stages. Andrew Patrick from the Communications Research Centre and John Stewart from Carleton installed the system and provided technical support. Finally, the University's President at the time, Robin Farquar, must be acknowledged for the risk he took in supporting the project. Without the university as an incubator, the project could never have started."

Chris Cope said, "When you try to paint a picture of FreeNet you struggle with words, or at least I do. I think an anecdote

that I can think of, that actually talks to FreeNet as a community. I remember we had a party, we happened to have it at my house, at a period that I was Executive Director. I have a pool and I think I only did this once at the house .... I remember one of the volunteers, Elisabeth Fung ... she was at the party. Even my wife, who has never had much to do with FreeNet, understands a bit about how FreeNet is something more than an ISP and so Elisabeth is sitting on my patio talking about the problems with her tree with bugs, that needed to be cut down. So my wife ... says 'Elisabeth, Chris has got a chainsaw, he'll come and cut your tree' (laughs). And, absolutely, that was a correct statement. So, I remember the following weekend or two later I went over to Elisabeth's house and cut down her tree. There it was, so bug-laden you couldn't imagine. But the interesting thing about this is that is cemented a bond between me as a person and Elisabeth as a person that was already forming ... suddenly we were friends. And that happens, many times over ... It's a little bit of that 'paying it forward' thing.

“One of the CAP (Community Access Program) sites was in Vanier and it was basically out of the ... community resource centre ... I was involved in the early days before they ever had it in the beginning and we did a focus group that was orchestrated by the Executive Director of the community service centre ... We sat around a table in a community room ... and asked them what they needed. We found, first of all, that these people were generally quite well educated, most of them post-secondary. None of them had jobs or very few of them had jobs and so we got talking about how to get a job. They said, 'it's very hard for us because we can't afford a newspaper and we don't have a telephone' and so in the end we ... focused this one around the whole business of re-employment, so we had newspapers, we had lots of copies, we had computers, we had instructions on 'how to do a

resume', we had 'how to use a computer', how to do a computer search for a job, all that kind of stuff. It was actually a very heart-warming thing but it was quite interesting to see these people, who were nice people, they had good educations, but every one of them had a story. The story can be a lot of things, 'I was a wife and I didn't work for thirty years and suddenly my husband left me', or 'I just got out of jail' or whatever. There was always a story, a very personal story, sometimes it was heart-wrenching, but they were in this hole and couldn't get out and so we were able to give them a tool. A lot of what we do at FreeNet does a lot of that. It may be that not all our members are in the hole, but those who we have introduced to FreeNet and taught them how to use it, taught them how to solve a problem or solved their modem problems or to even handle their phone call when things went screwy, because they do go screwy (laughs), then I think we are a much different place than a commercial ISP."

## Bibliography

- Dickson, Rosaleen and Pierre Borque, *Freenet For The Fun Of It*, Custom Printers of Renfrew, 1995.
- Lacasse, Dominique, FreeNet Plugs Ottawa In, *Ottawa Citizen*, 1 February 1993
- *Ottawa Citizen*, Locals Lay The Foundations, Page E1, 2 February 1994
- Seaman, Al, et al, *The Official FreeNet Survival Guide*, National Capital FreeNet, updated version, April 1995.