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# THE EFF IN WASHINGTON

Our Washington liaison, Jerry Berman, reports that we are very close to an agreement with key congressional committees on a final draft of the NREN bill. This draft will then be sent to the floor of congress for what we believe will be a swift passage. Passage of this bill establishes a high-speed research and education network that will be superimposed upon the current Internet. The NREN will continue all the current functions of the Internet as well as being a testbed for various high speed experiments. In addition, it will allow for commercial transactions as well an enabling wider and more open access for millions of present and future users. If all goes as planned, we will have a bill that will create a viable network that will be a true precursor on the National

Public Network.

Berman also noted that, with things returning to normal in Washington, Congress will begin a series of hearings on the future of the telecommunications infrastructure. In part, this is in response to the advent of the Baby Bells as information providers. In order to help ensure that the EFFs goals of open, fair, and easy access to networks are always part of the discussions, we will be giving formal testimony before the Subcommittee on Telecommunications and Finance on October 24..

In a related development, the EFF, People for the American Way, and the ACLU have been in communication with key congressmen and staff on recent incidents involving telephone companies and 900 numbers. It has come to our attention that there has been an unhealthy trend on the part of various telephone companies to restrict the ability of various groups to use 900 numbers based on the political content of their proposed 900 line. This is antithetical to the charter of telephone companies as common carriers, as well as an affront to First Amendment rights. As such, we have decided to oppose this "policy" wherever it arises.

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# EDITORIAL:

AMENDMENTS WOULD UNDO DAMAGE OF MORRIS DECISION by Mike Godwin

The Supreme Court's decision this month not to review Robert Morris's conviction under the Computer Fraud and Abuse Act was a disappointment to those who believe, as we do, that the Act should distinguish between defendants who intentionally cause damage and defendants who do so accidentally. Still, there is a good chance that the damage done by the decisions of the lower courts in the Morris case will be undone by Congress.

The Senate has recently passed amendments to the Computer Fraud and Abuse Act (18 USC 1030), both as part of the omnibus crime bill and as a stand-alone statute. We at EFF urge the House to approve the amendments, since they correct the damage done by the Morris decision, and since they add a requirement that the government report to Congress its prosecutions under 18 USC 1030(a)(5) (the section under which Morris was prosecuted).

## The Morris Decision

Readers may recall that the effect of the courts' interpretation of 18 USC 1030(a)(5) in the Morris case was to make the intent \*to access\* the only intent required to be criminally liable. As currently construed, the law makes no distinction between cases in which the damage is intentionally caused (the hypothetical computer saboteur) and cases in which the damage is unintentionally caused (such as the Robert Morris case).

It was precisely this issue that we hoped the Supreme Court would address in the Morris case.

## The Senate Amendments to the Act

These amendments, which have already passed the Senate both as a stand-alone bill and as part of the omnibus crime bill, modify 18 USC (a) (5) in the following ways:

- 1) For a \*felony\* conviction under (a)(5), the defendant must have knowingly "cause[d] the transmission of a program, information, code, or command to a computer or computer system," \*and\* the defendant must \*intend\* that the program cause damage or the denial of services." (Note that the mushy concept of "access" has been changed to a more precise notion of "transmission.")
- 2) For a \*misdemeanor\* conviction under (a)(5), the defendant may have knowingly "cause[d] the transmission of a program, information, code, or command to a computer or computer system," \*and\* the defendant must have caused this transmission \*with reckless disregard\* as to whether the transmission had a risk of causing damage or the denial of services.

In short, where the current law has only one intent requirement (intentional access), the amended law would have two intent requirements each for the felony and the misdemeanor offenses.

Under the facts of the Internet Worm case, Robert Morris, who was convicted under the old (a)(5) and could have received up to 27 months in prison, would have been convicted of a misdemeanor under the new (a)(5), and could have received no more than one year. (As it happens, the uniqueness of Morris's offense led the sentencing judge to depart from the Sentencing Guidelines and sentence Morris to public service and probation.)

EFF's position is that the underlying conduct in the Morris case ought to be punishable, but not as a felony. Moreover, criminal laws addressing computer offenses should, like the majority of criminal laws, require proof of intent of the key elements of a crime, and not just the single element of access. The Senate amendments, if passed, achieve both goals.

This is not to say that the amendments perfect the Computer Fraud and Abuse Act—the amendments' drafters could have decided not to replace the "federal interest computer" jurisdictional language with the possibly broader "interstate commerce" jurisdictional language that so often gives near—unlimited scope to federal criminal statutes. And they could have raised the damage threshold for felony liability—as Marc Rotenberg of Computer Professionals for Social Responsibility has observed, "\$1,000 for a felony act is extraordinarily low."

Nevertheless, the amendments have the overall effect of turning a badly drafted statute into a better one, and we urge Congress to approve them.

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# MEANWHILE, BACK AT EFF.ORG

Here in the Boston office, the daily work of the staff continues apace....

Mike Godwin comes in fairly early, leaves fairly late and spends a lot of his day fielding fly balls and hot grounders that come in over the net and the telephone. Recently, he heard from a member of EFF who had had his account pulled when a system administrator discovered copies of Phrack in the user's home directory. Godwin was able to convince the sysadmin that merely having copies of this publication was a) fully protected under the Constitution, b) not the same as "having a burglar's tool kit", and c) certainly not grounds for suspending a user's account.

Rita Rouvalis handles a host of administrative chores, manages the membership base and members questions that come in from all over the net. Recently, she's taken a more active role in the various topics that emerge on our Usenet group, comp.org.eff.talk. One of the most pressing topics has been the growth of the discussion regarding local chapters. In order to focus this discussion, Rouvalis has started a mailing list, which she announced in eff.talk:

New moderated mailing list chapters-discuss@eff.org.

Many of you have been persistent, hopeful, eager, and impatient about the prospect of whether or not EFF is going to set up local chapters — especially since the formation of the Austin Chapter. Since these Chapters would be primarily for and by you, our members, we think you should determine how they will be set up and run. That's right; we're leaving the thinking up to you on this one.

If you are interested in discussing the issues surrounding local chapters, send e-mail to chapters-discuss@eff.org to join a moderated mailing list dedicated to talking about chapters. All the members of the Austin Board of Directors are on the list to answer questions and offer their input.

On the technical side of things, our tireless system administrators, Chris Davis and Helen Rose, are continually seek new and better tweaks and upgrades for our technology. When asked to tell everyone exactly what they were up to, Helen Rose wrote the following:

## EFF's overworked Sun

eff.org, our overworked Sun 4/110, sits in an almost-enclosed corner of "Tech Central", the area at EFF World Headquarters where most of the dirty technical work is done. When this machine isn't sitting, panting, in the corner, it usually means the machine is down for backups, maintenance, or something along those lines. Hopefully, EFF will be getting a grant from Sun in the near future, allowing us to retire the current eff.org and replace it with a modern, fast, Sun SparcStation 2.

Connected to eff.org are three SCSI disks of various sizes, and an Exabyte tape drive, for backups. We are currently waiting for delivery of a fourth SCSI drive to allow us to expand our WAIS and FTP archives further. The Sun 4/110, although old, looks brand new when compared to the DECWriter III we have hooked up to it, for logging purposes. We also have a modem group attached, for remote users to dial up, and for UUCP connections.

Priorities for the future include replacing eff.org (as mentioned above); adding additional modems to allow more remote users to dialup simultaneously; increasing the available disk space, and possibly adding an archie server. For the latter, we would need to upgrade our leased-line (currently 56Kb, we'd need to go to a T1 -- 1.544Mb/Sec. This is already being researched.) and dedicate a machine just for archie\*\*, since the archie server is known for not being "generous" about CPU cycles. The software is being tested to explore the feasibility of this project. At the present time, guest accounts or even a guest machine have been thought of, but put off as being "impractical" due to resource limitations.

\*\*\* What is 'archie'? -- taken directly from the Archie Documentation written by Alan Emtage

'archie' is a database system which retrieves and maintains the file directory listings of several hundred archive sites accross the Internet. Users of the Internet may log onto a host running the 'archie' system and query the database as to the location, modification times and size of any program or document that they may be searching for, stored on an anonymous FTP site somewhere on the network. Alternatively, 'archie' provides an email interface to the database which allows those users not directly connected to the network to contact it.

The 'archie' system actually consists of a number of distinct components, which perform such things as the retrieval of the site listings, the updates to the database and the interactive and electronic mail interfaces.

Besides storing site listings, 'archie' also maintains a text database known as the Software Description Database, whose purpose is to provide users of the network with a short description of the thousands of various software packages and documents avaliable on the anonymous FTP sites.

To access an 'archie' server, connect to any of the following hosts with the login of "archie":

archie.mcgill.ca
archie.sura.net
nic.funet.fi
archie.au

Mitch Kapor continues with his tightly-packed schedule of speaking-engagements, Washington activities, article preparation, vast email correspondence and the day-to-day management of the EFF. Highlights of the last few weeks have included a three-day stint of seminars and BOF

sessions at Interop in San Jose, conducted jointly with EFF co-founder John Perry Barlow, speeches and presentations at MIT, becoming a member of the board of the Commercial Internet Exchange (see below), an EFF Board meeting in San Francisco and numerous meetings with key legislators and special interest groups in Washington, DC.

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#### ON THE ROAD WITH DAVID FARBER

[David Farber, a new member of the Board of EFF, travels widely both in and out of Cyberspace. Here are a few of his notes from last week's whirlwind tour through Europe.]

A Day At Telecom '91 Felix Closs of IBM Zurich was my host (and a great one). Telecom is a spectacular exposition of the kind that we no longer see in the US. For example, IBM's booth was a huge four-story affair complete with a private office for at the very top.

Hot items at the show were:

- endless video conference "telephones" operating on a basic ISDN network
- working at the show. Quality of the picture and the "telephones" were exceptional. Most if not all were Japanese. Oki was the leader. Alcatel also was in it.
- semi-endless ATM switches. Everyone was demoing and/or PRing 150 megabit and up ATM switches many using the 2.4 gigabit optical ring approach to the "internal" architecture. ATM was the HOT word.
- A GREAT stereo display plastic lenticular technology with a glass cover. No glasses required! VERY impressive. Should take two basic ISDN lines.
- OKI has lots of very high speed chips on display at the 2.4 gigabit range and beam splitters, optical 8x8 and wavelength division parts. I assume they were workable. It had impressive data sheets.
- every one had radio computers. IBM showed their 80186 "ruggedized" radio computer which operates over two way radio and/or cellular. Toshiba showed their modem for pager input (and soon two way). Lots of pager mail messaging shown.
- IBM Zurich showed their 1 gigabit LAN. Worked like a charm between the conference center and Cern and then onto via the 34 megabit system to Stugart. It was a neat piece of gear. Rainbow was also shown and so was a connection via the T1 to the US at Cornell showing visualization.

I have piles of literature and took photos. After Geneva it was on to Paris for a presentation at the OECD. That went well. I caught the standard Paris cold (I am home sneezing), but I ate like one can only eat in Paris.

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MITCHELL KAPOR JOINS THE BOARD OF THE COMMERCIAL INTERNET EXCHANGE

Falls Church, Virginia, October 4, 1991 -- The Commercial Internet Exchange Association (CIX) today announced that Mr. Mitchell Kapor has joined its Board of Directors.

Susan Estrada, President of CIX Association and also Executive Director of CERFnet, said "it is a pleasure to have Mitch join us in helping to encourage the growth of the Commercial Internet and establish a non-restrictive, open and and competitive public data internetworking marketplace internationally".

Kapor said "I am very excited about the prospect of joining the CIX Board. The CIX is a voluntary, cooperative association which embodies the best approach to providing an open platform for commercial internetworking."

Kapor has been active in public-interest work involving the social impact of computer and communications technologies.

The other members of the CIX Board include Estrada, Martin L. Schoffstall, Chief Technology Officer for Performance Systems International, Inc. and Rick Adams, President & CEO of UUNET Technologies, Inc.

The CIX Association is actively working to broaden the base of national and international cooperation and coordination among existing and emerging networking service providers. The organization provides a neutral forum for decision making as the global Internet migrates toward commercialization.

Kapor is also President and Co-Founder of Electronic Frontier Foundation (EFF), is a Board member of On Technologies, Inc. and is the Founder of Lotus, Inc.

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## TRUTH IN PACKAGING

From:Thad Floryan (thad@btr.com)

All this talk of cryptographic export restrictions CANNOT compare to the following short anecdote:

One product I designed uses Motorola's DES implementation, the MC6859 Data Encryption Chip.

With each shipment of chips is enclosed a stern warning (paraphrased, since I'm posting this from home):

``Products using this device are subject to export restrictions by the Office of Munitions Control of the Department of State...''

These are real pretty chips with a purple ceramic substrate carrier, shiny gold cap over the silicon, and 24 gold IC pins.

Turning the chip belly up, boldly emblazoned in white DAY-GLO lettering is:

## ``MALAYSIA''

Hoo boy! Motorola fabricates the silicon in Texas, then ships them OUT of the country for entombing, IMPORTS them back into the USA for resale, and now they cannot export the finished product.

And DON'T tell me only the package is fabricated in Malaysia. I had a \*LOT\* of problem with some Western Digital chips that I needed to enclose in a product going to Canada regarding the Free Trade Agreement (FTA); I finally called the Canadian consulate for advice, spoke with a representative in their Technology Import/Export Office, and he simply asked "What is the country name on the underside of the chip?". I said "SINGAPORE", and he said, "Sorry, that means the product was not 50% or more manufactured in the USA and thus is subject to import tariffs" (contrasted with NO tariffs under the USA/Canada FTA).

Thus, Canada believes the name on the underside of chips is the country of origin ( and now so do I).

Go figure (the situation with the MC6859 DES chip! :-)

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TOP TEN QUOTES FROM LISA V

~From: arensb@kong.gsfc.nasa.gov (Andrew Arensburger)

[Okay, so there aren't ten of them, but they are all quotes from the recent Usenix/LISA conference in San Diego. All quotes, as well as authors' names, are used with permission. -AA]

"We have the most [thorough] test guy in the world... [I showed him this program and he asked,] 'but Rob, what if time runs backward?'"

- Rob Kolstad (kolstad@sun.com)

"Those Macintoshes aren't the cute little boxes you think they are."
- Elizabeth Zwicky (zwicky@erg.sri.com)

"I will not be presenting this talk in rap."
- Arch Mott (amott@mips.com)

"I like having a machine called 'elvis' on the network because that way, I can say 'ping elvis' and have it come back with 'elvis is alive'."

- Carl Shipley (carl@jpl-devvax.jpl.nasa.gov)

"Could I have optimized [this script] for legibility? Yes, but then I would have had to use more slides."

- Tom Christiansen (tchrist@convex.com)

"I don't know why I didn't use an underbar here. Maybe it would have made my line wrap or something."

- Tom Christiansen (tchrist@convex.com)

"You know, we really ought to do accounting on the Unix boxes. It should be a ten-minute hack..."

- Former group head, 1987, quoted by John Simonson (gort@cc.rochester.edu)

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#### TELECOMMUTING

~From: brad@looking.on.ca (Brad Templeton)

One interesting consequence of telecommuting which may result in attempts at legislation is the interaction with the social democrat's view of equal pay for work of equal value.

One big advantage for the employer of telecommuters is that some areas of the country, and indeed the world, are far cheaper to live in, and the average salaries of various professions, including programmer and tech writer, are quite varied.

The programmer that costs \$80,000 in San Francisco might cost \$40,000 in rural Indiana. Of course the houses in SFO cost 5 times as much as Indiana, too.

Will employers push to hire cheap telecommuters? What if they go further, to China where the programmer costs \$10,000 or less?

Will people consider it fair for companies to pay equivalently skilled people vastly different sums based on where they live? Will the concept of expensive locations vanish in the telecommuting professions?

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THE FIRST TWO AMENDMENTS OF THE CYBERSPACE BILL OF RIGHTS

## 1st Amendment

Congress shall make no law respecting an establishment of a system, or prohibiting the free access to thereof; or abridging the freedom of posting, or of the user; or the right of the userbase peaceably to connect, and to email the government for a redress of grievances.

# 2nd Amendment

A well-informed userbase, being necessary to the security of a free system, the right of the people to keep, access and secure information shall not be infringed.

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# NEW CORPORATE/ORGANIZATION MEMBERSHIP AVAILABLE AT EFF

After a number of requests and much discussion, we have created a new membership category for EFF. This membership allows organizations to join. This membership fee is \$100.00 annually. The sponsoring organization can, if it wishes designate up to five individuals as active members in the organization. Five copies of EFFECTOR and all other materials produced by or made available by the EFF will be sent to the organization or the designated members.

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#### DOUBLE YOUR CONTRIBUTION TO EFF

Many major corporations, such as Digital Equipment Corporation and Microsoft, offer matching grant programs for their employees. These programs generally will match all or part of any donation made by an employee to certain charitable (501(c)3) organizations. If your company has such a program, doubling your contribution to EFF could be

as easy as enclosing the necessary paperwork with your membership application.

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#### MEMBERSHIP IN THE ELECTRONIC FRONTIER FOUNDATION

In order to continue the work already begun and to expand our efforts and activities into other realms of the electronic frontier, we need the financial support of individuals and organizations.

If you support our goals and our work, you can show that support by becoming a member now. Members receive our quarterly newsletter, EFFECTOR, our bi-weekly electronic newsletter, EFFector Online (if you have an electronic address that can be reached through the Net), and special releases and other notices on our activities. But because we believe that support should be freely given, you can receive these things even if you do not elect to become a member.

Your membership/donation is fully tax deductible.

Our memberships are \$20.00 per year for students, \$40.00 per year for regular members. You may, of course, donate more if you wish.

Our privacy policy: The Electronic Frontier Foundation will never, under any circumstances, sell any part of its membership list. We will, from time to time, share this list with other non-profit organizations whose work we determine to be in line with our goals. But with us, member privacy is the default. This means that you must actively grant us permission to share your name with other groups. If you do not grant explicit permission, we assume that you do not wish your membership disclosed to any group for any reason.

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"Why haven't we seen a map of the whole Net yet?"  $\,$ 

Helen Trillian Rose
Electronic Frontier Foundation
Systems and Networks Administration

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