Dear Mr. Andy Oram

Thank you for your interesting presentations at the meeting. We enjoyed it very much, but we have some questions to ask with regards to the free software movement.

First. We would like to know about how a software giant like IBM engages in the Open Source Software movement. Is it not a threat to the Open Source Software movement?

I don't know of any Open Source advocates who are worried about a threat from large commercial companies like IBM. In other words, nobody seems to be afraid that they could dominate or co-opt the Open Source movement. On one project--the GNOME desktop, which is popular on Linux—there was some indication that too much attention and control by various companies (including IBM) might misdirect the project. Several companies offered to pour a lot of money to GNOME and even assign programmers to work on its development. These companies created a board to help direct the project, similar to boards for corporations, universities, and non-profit organizations. There were reports that the board was trying to overrule the interests of GNOME's founders and main developers. I don't know whether people are still worried about the dominance of large companies; not much has been heard about GNOME recently. It seems to have technical and design problems independent of who's running the project.

Companies selling their own hardware and software, like IBM and Hewlett Packard, participate in Open Source in several ways. It's hard to generalize about their participation because it can take so many forms:

1. They promote open source software to their customers in order to sell hardware.

2. They sell traditional, proprietary products that run on open source software. For instance, IBM sells a product to manage Web sites that runs with the Apache open source web server. Besides applications, network management software is popular.

3. They contribute money directly to open source projects (as I showed with GNOME).

4. They provide other valuable resources, such as testing facilities. (There's an enormous one on the West Coast of the U.S. funded by a consortium of numerous companies.)

5. They rarely contribute their own staff (GNOME being an exception) but they do contribute packages of code they've developed internally.

The best known example of the last point (which I mentioned in my talk to you) consists of the journaling file systems that IBM and SGI donated to Linux. These file systems were developed to run on proprietary operating systems, but IBM and SGI decided it was more lucrative to 1) port them to Linux, 2) thereby make Linux more popular for large sites with databases and critical needs for reliability, and 3) sell other products that support this enhanced Linux. I should mention, as an aside, that these journaling file systems are appreciated but not considered indispensable. One individual created his own journaling file system for Linux. It has received good reviews and is included in the kernel as an option. So Linux would have a journaling file system through standard open source development practices, even if IBM and SGI had not made their generous donations.

Specifically,

1. Are there any differences between individual programmers and a company like IBM in participating in the research and development process of Linux? If so, please tell us the differences in more detail.

Yes, there is a big difference. My discussion of corporate support for journaling file systems should illustrate the difference. Rarely do corporations assign programmers to mingle with open source developers (although I believe it happened with GNOME). These projects do best with volunteer programmers However, many individual programmers throughout the computer industry (and other fields) may choose to participate voluntarily. I am sure (although I don't have examples) that many companies quietly tolerate it when talented programmers take time away from corporate projects to contribute to open source projects.

Companies can contribute finished projects like the journaling file systems, but this happens fairly rarely too. The Netscape browser was made open (the Mozilla project) but that is a unique case of a company turning a proprietary product into an open product. It does not seem to be succeeding as a project, and it certainly is being managed like a proprietary project instead of an open source project. Most often, companies don't do the programming but contribute money, as well as testing facilities and similar ancillary support. It's also very valuable when a well-respected company promotes open source products.

2. In the case of IBM, how do the rules of GPL apply to the derivative or collective business measures invented in the process of research and development?

Companies can choose any license they like when they release code (which as I said, is not very often). I am not sure what the question asks, but I believe you are asking whether companies can make use of research and code for proprietary purposes while still releasing the code under the GPL or a similar license. Yes, they can continue to use the code as the basis for proprietary products. No one else can do this, though. Only the person who wrote the original code. To quote from a Frequently Asked Questions list about the GPL: "To release a non-free program is always ethically tainted, but legally there is no obstacle to your doing this. If you are the copyright holder for the code, you can release it under various different non-exclusive licenses at various times."

Secondly, the relationship between distributors like Redhat and NASDAQ:

1. After the so-called Internet bubble burst and the NASDAQ stock price decline, there are some arguments that the distributor should have remained in the free software community. And there is criticism that the commercialization of the software movement is against the rules of GPL. What are your comments on this?

I was not aware of this controversy. I was not aware that Red Hat had released anything under a non-GPL'd license. Can you point me to some articles?

Thirdly: how do you assess the Internet Bubble in terms of the free software movement?

This is a very interesting question that you've made me start thinking about. Certainly, as we discussed in our meeting, it will be harder for programmers to work on open source projects because they'll be busier at their regular jobs and will be earning less, so they won't be as able to take time off to work on volunteer projects. But in a couple ways, the recession may help open source. First, many companies will fail, both open source and proprietary. But the wonderful difference between proprietary software and

open source software is that proprietary software generally disappears along with its company, while open source software is in the community and can be enhanced by new volunteers, just as happens to any open source software whose original developer leaves the project. Second, companies will be more reluctant to pay ever-increasing licensing fees for proprietary software, and be willing to consider cheaper solutions even if they don't have the bells and whistles (convenient, superficial features) of a proprietary project.

1. We believe that the effects of the Internet bubble burst and September 11th attacks have invited severe government regulation of the Internet. Does this further government intervention affect the open source movement?

As I said during our talk, the iron fist of the copyright holders and their government servants came down quite hard even before September 11. People have gone to jail, not for distributing copyrighted material itself, but for distributing programs that people could use to circumvent technical copyright protection. There were also some cases of severe punishments being assigned for breaking into computer systems.

The bursting of the economic bubble has not produced any changes I've noticed, but certainly the government is trying to tighten criminal penalties in the wake of September 11. There are official groups who are supposed to work on security, although I don't think they're being effective and I haven't heard of any useful results. The anti-terrorism bill in the U.S. creates stronger penalties for basic infractions like computer break-ins; the international cybercrime treaty mirrors the U.S. bill and also creates new ways to prosecute copyright infringement internationally.

2. Generally speaking, the concentration of capital would be acceralated in times of economic recession and would give more advantage to the big corporations like IBM and Microsoft. What about this Internet recession? Is this recession going to make the Open Source movement more difficult in terms of support in the personnel and financial sectors?

I understand the consolidation you're referring to, but I don't see why it would reduce support for open source. I think the incentives are the same (or greater, as I said above) for users to adopt open-source. Therefore, big computer companies will continue to find it useful.

Fourthly, the relationship between Open Source software movement and the Peer-to-Peer movement:

1. How do you see the P2P movement with regards to the Free-Soft movement? Specifically, do you see P2P movements as a mere extension of Free-Soft movement, or as a new revolutionary stage, altogether?

   Sometimes I see P2P as a nice concept that has accomplished what it was supposed to accomplish and is too vague to be useful anymore. But I am also hearing indications that it truly is an explosive, revolutionary concept. I just read a draft from someone (I can't give away too much) suggesting that Internet users will get tired of increasing commercialization and corporate control, and will exploit P2P to develop small, personal, private networks with friends and people they meet through a web of trust. If P2P merely offers more efficient ways to accomplish our current tasks (like sharing files) it will fade in importance. But it

may radically change how people meet each other, trust each other, and work together.
Some of the most interesting P2P projects I've encountered, by the way, have been proprietary. They were being developed for several years at the same historical time that open source developers were discovering peer-to-peer solutions like Freenet. The small companies developing many of the most interesting P2P products will have difficulty surviving, like all small companies. So open source solutions may grow in importance. In a growing area with many players like P2P, open source is less important than standards (a theme commonly repeated by Tim O'Reilly). If good standards are developed, both open source and proprietary developers can do their best and their products can work together (if the standards are precise enough).

We appreciate your comments and good luck to you on your P2P movement.