Brazil Adopts Open-Source Software

Article Summary

Brazil Takes Open-source Road To Development
(Friday, March 4, 2005)
Brazil has announced its intention to make good on a plan to shift to open-source software to provide more citizen access to computer technology, save money, and defend sovereignty. Inflated international restrictions on intellectual property have awakened Brazilian officials to the prospect of legal assaults on the country's technological infrastructure. Conversion to software open to use and modification in an environment of mixed motivation, where profit is not the prime mover, also challenges conventional economic assumptions.

Lesson

Your group of three has been assigned to be the spokespeople for the Sergio Amadeu and the Brazilian Instituto Nacional de Technologia da Informação. As the spokespeople, you must be prepared to answer all kinds of questions about the policy decisions made by Amadeu and the Instituto. At an upcoming press conference you expect reporters to be asking tough questions about the "open-source" software policy. In your group, you need to prepare yourselves to answer these questions. Some questions you anticipate are:

1. What exactly is open-source software? How does it differ from software from Microsoft?
2. How will the adoption open-source software give the poor an advantage that they would not have if the government continued to use Microsoft programs?
3. How will the change to open-source software help the Brazilian government to address the problem of poverty?
4. What did Amadeu mean when he referred to Microsoft as "traffickers" who seek to addict people to their products? Is this an accurate description?

Lesson Content Links

'' Wikipedia''
http://en.wikipedia.org/wiki/Open-source_software

"The Origins and Future of Open Source Software"
http://www.netaction.org/opensrc/future/intro.html

"Governments Push Open Source Software"
http://news.com.com/2100-1001-272299.html?legacy=cnet

"Activists Urge Free Open Source Software"
http://www.foxnews.com/story/0,2933,145827,00.html

"South American Warms to Open Source"
http://www.theregister.co.uk/2005/02/10/south_america_open_source/

"Brazil Extends Microsoft Challenge with Global Group"
http://quote.bloomberg.com/apps/news?pid=10000086&sid=aJ08rWTOnQsk&refer=news_index

Brazil Takes Open-source Road To Development

Brazil has announced its intention to make good on a plan to shift to open-source software to provide more citizen access to computer technology, save money, and defend sovereignty. Inflated international restrictions on intellectual property have awakened Brazilian officials to the prospect of legal assaults on the country's technological infrastructure. Conversion to software open to use and modification in an environment of mixed motivation, where profit is not the prime mover, also challenges conventional economic assumptions.

The strategy underlying the change was articulated early in the administration of President Luiz Ignacio Lula da Silva when he appointed Sergio Amadeu to head the Instituto Nacional de Tecnologia da Informacao (ITI) in 2003, the year he took office. Paying software licensing fees to Microsoft and other companies was, in Amadeu's view, "unsustainable economically." Amadeu set to work almost immediately to encourage all sectors of government to move to open source. "We have some islands in the federal government using open source," he said then, "but we want to create a continent."

Prior to taking up government work, Amadeu authored the book Digital Exclusion: Misery in the Information Era. The fundamental proposition of the book is that unless the poor have the same access to technology that the rich have, the gap between them, already the deepest in the world, will only widen. His first steps toward narrowing the gap were to enter into an agreement with IBM to boost government use of the open-source operating system Linux, replacing Microsoft's proprietary Windows, and to move toward replacing proprietary software on Brazil's more than 400,000 electronic voting machines.

The Lula government is not just looking to save the licensing fees it pays to Microsoft, estimated at 6% to 10% of the more than US$300 million the company makes from Brazil each year. Brazil is Microsoft's largest Latin American market. The government's position is that open source is essential in a country where only 10% of its 182 million people have computers and where a heavily indebted government is the largest buyer of the machines.

Battleground Brazil

Brazil has thus become fertile ground for ongoing battles between Microsoft, with its monopolistic business model, and other companies looking to launch a competing model. IBM-Brazil has cast its lot with Linux, the open-source operating system, in its challenge to the software monolith. The company has signed a cooperation agreement with the Sao Paolo state government. Under the terms of the agreement, IBM will train 980 state professionals in managing Linux-based IT environments. Haroldo Hoffmann, IBM Brazil's Linux executive, said his focus is on implementing open standards throughout the country. He said the company's

developers around the world are working to improve the Linux kernel, since all IBM's hardware, software, and services are prepared to run and support open standards. The program is not limited to Brazil; the company has more than 50 agreements signed with governments worldwide. The Sao Paolo training, which began in February, is made up of five modules, the first three devoted to Linux. The fourth emphasizes the use of IBM open-standards software, and, in the last, trainees will practice solutions at IBM facilities. As the largest developed area in Latin America, accounting for 22% of Brazil's population, Sao Paolo seemed a propitious place for the 12-month program.

Sharing some, but not all, of the wealth IBM has already released 500 of its patents to open-source developers. The patents cover management, electronic commerce, data storage, and image processing. The release is remarkable for its radical departure from the growing emphasis on husbanding intellectual property in international trade and in the agreements upon which that trade is based. Said Jim Stallings, vice president in charge of patents and intellectual property at IBM, "This is a much greater contribution than we've ever made in the past. It is possible to use these data in an innovative way to build something totally new." To have access to these patents, users must subscribe to the criteria of the Open Source Initiative, an organization that defines distribution, publication, restriction, and other policies making up open-source standards. The patents released represent a small portion of those owned by IBM. The company registered 3,248 new ones in 2004 alone.

IBM also has an agreement with the government to establish a knowledge and technology center, the Centro de Difusao Tecnologica e Conhecimento (CDTC), at the Universidade de Brasilia. The CDTC will be involved in training professionals from the public schools and state education bureaus in open-standards technology in courses given in all state capitals. Amadeu explained, "CDTC will allow a vigorous dissemination of knowledge throughout the country, in addition to expanding the national technological intelligence." It will also support collaborative-development and technological-migration projects from public agencies and small companies. The left operating in unexpected ways Brazil's commitment to open source represents more than a collision between a developing government and a multinational corporation seeking to fit the world into its business model. The move clearly fits the most classic and fundamental tenets of a left agenda, to the extent that it can easily be interpreted as a popular "seizure of the means of production." Because it has occurred without violent revolution, it has largely blindsided conventional economists like Brazil expert Albert Fishlow, who publicly insists that "there is no left in Latin America."

IBM's cooperation in the initiative demonstrates another tenet of leftist fundamental thought, that of capital's vulnerability to its own internal contradictions. As IBM goes head to head with Microsoft, Brazil frees capital to invest in social projects. More broadly, the open-source concept is championed by the World Social Forum (WSF), another Brazilian initiative that embraces not only leftist social movements, but also movements from areas of the world that do not locate their politics on the right-left continuum (see NotiSur, 2005-02-18, 2003-02-07, 2002-02-22, 2001-02-02). At this year's WSF convocation in Porto Alegre, a special meeting was held to discuss software licensing. Gilberto Gil, Brazil's minister of culture, John Barlow, Grateful Dead lyricist and founder of the Electronic Frontier Foundation, and the chairman of Creative Commons, Stanford University law professor Lawrence Lessig, addressed the meeting. Barlow

told the assembly there is no need to spend desperately needed resources on proprietary software when open-source alternatives are available. "Brazil already spends more in licensing fees on proprietary software than it spends on hunger," he said.

WSF is a laboratory for testing alternative concepts of the relations of property extending beyond the intellectual, toward land, patents on agricultural products, and on proprietary drugs, and even on copyright rules in the arts. The forum is a growing counterweight to the rules under which countries struggle to develop.

Lula snubs Gates

The WSF annual meetings coincide with those of the World Economic Forum (WEF) in Davos, Switzerland. Lula attended both this year. At the WSF, he heard criticism of his failure to increase social spending. At the WEF, he heard a request from Bill Gates, Microsoft founder, for a meeting. Lula's press secretary said Gates wanted to talk about the president's open-source policy, and Lula turned him down. Sergio Amadeu said to the media, "Brazil would gain nothing with [the meeting], but Microsoft would." He said that Gates "wants to push Lula in another direction," not only on this issue but on a program of Lula's to buy a million computers, Linux equipped, to distribute to the popular classes. The machines will be loaded with 25 other open-source programs. The government will also open 1,000 centers in poor neighborhoods with free Internet access.

Microsoft had initiated a lawsuit against Amadeu in 2004 after he compared the company to "traffickers who give free samples so that people become addicted later and pay for more doses." The company later dropped the suit, but continues to give indications it doesn't intend to make the transition easy for Brazil. In what may yet prove to be a counterproductive maneuver, it announced it would limit noncritical updates of its Windows software to registered users. Henceforth, it will not be possible, for instance, to download the latest version of Media Player, unless the user has registered. The company has estimated that 60% of the software in use in Brazil is illegally copied, or otherwise irregularly obtained, and has posed the new policy as an anti-piracy measure. Other allies in Lula's campaign to change the rules include Sun Microsystems and Hewlett-Packard, both supporters of free software. Said Amadeu, "Sun, HP, and IBM don't intimidate the Brazilian government, they collaborate with us."

 [Sources: The Register (UK) 11/24/03; eweek.com, 09/09/04; Folha de Sao Paolo (Brazil), 05/03/04, 01/11/05; open-mag.com, 01/18/05; Associated Press, 11/16/03, 01/31/05; National Public Radio (US), 01/31/05; vnunet.com (UK), 02/01/05; The Times of Malta, 02/07/05; Reuters, 02/16/05; Brazil Under Lula, seminar by Albert Fishlow, University of New Mexico, 02/25/05]

Standards

National Standards (McREL) http://www.mcrel.org/

- *Economics Standard 2*
    - o Understands characteristics of different economic systems, economic institutions, and economic incentives
- *Economics Standard 4*
    - o Understands basic features of market structures and exchanges
- *Language Arts Standard 4*
    - o Gathers and uses information for research purposes
- *Language Arts Standard 7*
    - o Uses reading skills and strategies to understand and interpret a variety of informational texts
- *Language Arts Standard 8*
    - o Uses listening and speaking strategies for different purposes
- *Technology Standard 2*
    - o Knows the characteristics and uses of computer software programs
- *Technology Standard 3*
    - o Understands the relationships among science, technology, society, and the individual
- *Technology Standard 4*
    - o Understands the nature of technological design