Australian Government Considers Open Source's Role

Australia's National Office for the Information Economy's open-source software seminar highlighted government agencies' divergent positions on OSS. Interest in what OSS offers is keen, but rapid agency adoption is unlikely.

Core Topic

Government: Government Infrastructure & Applications

Kev Issue

What applications will affect the operations of government?

On 18 February 2003, Australia's National Office for the Information Economy (NOIE), the lead government agency for information economy issues, conducted a seminar on open-source software (OSS) relating to government in Australia. More than 140 participants comprised government agency information and communication technology (ICT) professionals, as well as invited guests from academia, Gartner, the Australian Unix and Open Source Users Group, ICT professional organizations and major vendors. According to NOIE, an additional 100 people expressed interest in attending, but couldn't due to space limitations.

The seminar addressed the relevance, experiences and demand for OSS by government agencies, with a focus on Linux-based operating systems and applications. NOIE organized this seminar in response to demand from government CIOs (see www.noie.gov.au/projects/egovernment/Better_Infrastructure/OS S/oss_seminars.htm).

Australia's View on OSS

In its role of raising the awareness and understanding of information and technology issues of government agencies, NOIE's approach is one of "skeptical neutrality" between proprietary software and OSS, as well as between vendors. The Australian government is taking a "federated governance" approach to OSS; it has not specified a position on OSS's adoption and use, preferring that agencies make their own well-informed decisions. However, government purchasing guidelines specify "fit for purpose" and "value for money" as primary decision criteria. Several Australian government agencies have chosen OSS under these criteria.

Gartner

Government agencies are showing a strong interest in understanding the opportunities offered by OSS as an alternative to commercially provided software. A major driver for this interest is the promise of reducing the costs associated with software purchases and overall total cost of ownership. However, OSS adoption, primarily Linux, is embryonic. Two lead Australian agencies that spoke at the seminar have initiated OSS programs: the Department of Veterans Affairs (DVA) and the Bureau of Meteorology (BOM).

The DVA is a large federal government agency that is responsible for delivering services to war veterans, defense personnel and their dependents. As part of an outsourcing contract renewal and "technology refresh" program, the DVA recently replaced more than 400 Windows NT file, print and messaging servers with a single IBM Z-800 mainframe running multiple images of Linux. The DVA's business case was based on lower replacement costs for the mainframe, data center resources and software, and reduced ongoing maintenance and support costs.

The BOM is the Australian government agency that is most actively using OSS. It is a prime example of a wider trend of OSS being first adopted in niche areas of research, or scientifically oriented and collaborative organizations. Importantly, the impetus for adopting OSS came from senior management in the agency, not from technologists.

The BOM employs OSS in three ways:

- It adopted open-source principles to develop VisAD, a Java component library for the physical sciences that the BOM uses for delivering weather visualizations and forecasting to a public self-service Web portal. Finding no suitable commercial software to meet its needs, the BOM collaborated with the University of Wisconsin to enhance an open-source tool. The BOM contributed money, intellectual property and professional time to this initiative; the resulting software is being distributed to weather bureaus and other organizations worldwide using an open-source licensing agreement.
- It uses a Linux cluster to run the weather portal, one of the government's busiest Web sites, with up to 13 million hits per day. To support forecasting, the BOM collects half a terabyte of data per month and maintains 140 terabytes of data online in an Oracle database running on Linux. The BOM claims that substantial cost savings have been achieved by employing a Linux cluster, compared to proprietary Unix alternatives.

• It runs Open Office on some desktops.

IBM's and Microsoft's Views

The NOIE seminar presented an opportunity for two major vendors — IBM and Microsoft — to submit their contrasting positions on OSS, and allow for participant questions and debate.

IBM's position was to:

- Promote open standards and their growing importance in enabling innovation and creating value in a connected world
- Focus on Linux at the server level, concentrating on enterprise scalability issues and security, but not on the desktop (yet)
- Commit US\$1 billion to adapt all IBM products to Linux and US\$300 million to create operating system support infrastructure, as well as more than 250 developers to work on Linux, including a small team based in Canberra, Australia's federal capital

Microsoft's position was to:

- Emphasize the business case for "commercial software" and associated development/support, including flow-on effects for local economies (for example, citing that Microsoft partners earn \$8 for every \$1 earned by Microsoft)
- Adopt some open-source community practices, such as open standards that support rapid deployment and interoperability
- Provide source code to governments, education and defense organizations, with a commitment to eventually move all Microsoft products to the "shared source" model

Gartner's View

The seminar provided participants with a good overview of OSS, as well as some issues to consider and several government case studies. Interestingly, little discussion arose around the typically limited functionality of OSS systems deployed, compared with the richness and complexity of commercial software.

The main driver of agency interest in OSS is the potential for cost reduction. However, most prospective users are taking a "wait and see" approach before making OSS decisions. The BOM is a standout example of an agency that has embraced OSS not only as a user, but also as an active contributor to the open-source community.

Microsoft surprised many participants with a message of greater tolerance and respect for OSS. However, while claiming support for open standards, Microsoft did not provide details on whether it will publish application programming interfaces for Outlook and its Office suite. How error fixes and improvements resulting from Shared Source initiatives would be incorporated into future versions of the software was also unclear.

IBM and Microsoft did not address opportunities and issues relating to desktop OSS.

Judging by the interest shown at the seminar, we believe that IBM and other major alternative vendors and service providers will have an influential role in the progressive adoption of OSS solutions by government agencies in Australia.

Bottom Line: Open-source software is starting to make inroads in some Australian government agencies. Many others are interested, based on the level of attendance at the National Office for the Information Economy's seminar. NOIE provided considerable benefit in conducting this seminar, which was an important first step toward adopting OSS for many participants. However, more education about OSS is required. In response to many follow-up requests, NOIE is planning other seminars to delve deeper into the issues, costs and possible benefits of OSS. Australian government agencies should use total cost of ownership models to determine whether a strategic commitment to OSS will achieve benefits greater than license cost savings alone.

Acronym Key

BOM Bureau of Meteorology
DVA Department of Veterans

Affairs

ICT Information and

communication technology

OSS Open-source software NOIE National Office for the

National Office for the Information Economy