



Ubuntu helps Howard County Library save thousands of dollars on deployments and upgrades

The Ubuntu demo "knocked our socks off".

Amy De Groff, head of Library Technology Services for Howard Country Library When an upgrade to Windows Vista across all of their Desktops was going to cost in excess of \$339,000, Howard Country Library turned to Ubuntu as a cost-effective, easy-to-use and reliable solution.

Background

The Howard County Library System is a big operation. Its six branches serving central Marylan, between Baltimore and Washington D.C, circulates five million "units" per year (in library terms, a unit is a book, a CD, a tape, or some other content type).

Today's libraries are about far more than books. They're increasingly about computers and web access. People use them for web research, for fun and for business. The goal for Howard County Library is no different: to provide the public with access to library collections and services while containing technology costs.

Business challenge

While Howard County is affluent, one of the nation's richest set of zip codes, the library system's budget is fairly restricted. Its aging PCs were running Windows NT, Windows 95 or Linux. The library wanted users to have a Windows-like experience but moving all guest PCs to Windows Vista would require a full-on hardware upgrade at more than \$1,000 per computer.

"If I had wanted to offer 283 computers on Vista, we estimated it would be about \$1,200 per desktop and we'd also need software to lock it all down," says Amy De Groff, head of Library Technology Services for the system.





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Amy De Groff, head of Library Technology Services for Howard Country Library "The library wanted to provide its visitors with a full array of desktop productivity tools for word procession, creating spreadsheets and presentations running with a Windows-like GUI. As well as trouble-free web surfing. But it did not want to pay for, indeed could not afford, to move to the latest Microsoft Windows-and-Office tandem," De Groff says.

In addition, the library runs a fleet of a dozen servers, 30 laptop loaners, and 210 computers for staff. That's nearly 600 computers and if that \$1,200 figure held true, the library would be spending too much money on basic infrastructure that could be better spent on more value-added services.

The library also needed to lock down the PCs to prevent configuration changes and security issues while allowing users to freely surf the web.

Ubuntu solution

The answer on both the cost and security fronts came in the form of Canonical's Ubuntu distribution. "The organisation was pre-disposed towards Linux both economically and philosophically," De Groff notes.

"Libraries mediate access to information, they're open to all and it seemed natural that we should use open source to further that aim."

The Howard County Library looked at Red Hat but the Ubuntu demo "knocked our socks off." The decision was made.

A consultant helped customise the install to exactly what the library needed. Because of Linux' multi-user roots, Ubuntu suits shared PC use – it lets the library isolate or "sandbox" each user's experience on a shared machine so that viruses or malware are not a factor.

This user isolation is key in a situation where people – who may not be the most PC savvy – do their personal taxes or home finance work on shared computers.

"We have it set up so that when a user is finished, anything you've done on the web goes to a local home file. It's saved there. When you leave and log off, we dump that folder. There are no security concerns." says De Groff.

Ubuntu is leaner than Vista, so the library buys second-hand Dell machines at a steep discount. De Groff typically buys the PCs (there are three approved models) in lots of ten from an outlet in Texas and has them shipped to her branch where the BIOSes are changed to permit network boots.

Cost per machine is \$300 compared to four times that for the more powerful machines Microsoft Vista and Office require.

The system is now running Ubuntu 7.10 on the desktops and Ubuntu 7.04 on the servers. Two of the 12 servers, are still on Windows which "we are sad about" but they should be moved over to Ubuntu within six months, De Groff says.



OpenOffice 2.3 and Firefox are also installed. The biggest challenge is explaining to web surfers that some web sites they have trouble viewing were designed for Internet Explorer.

De Groff is a huge fan of Canonical as well as its Linux distribution. The code is rock solid so the library system has never had an issue. If there was a glitch, "what Canonical offers us is that they're there. There's actual support. With Microsoft, there's a perception of support but somehow I never got any help from them," she notes.

De Groff takes her work home with her, literally. She has the library software image on her home machine. "I want to be able to truthfully say that my children play on this machine."

Result

The Howard County Library system is able to offer users a suite of full-functioned productivity applications, free and easy web browsing, and secure desktops all for a fraction of the price of a closed, Microsoft-centric solution.

