Case Study

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# Ubuntu is the open source platform of choice for Oxford Archaeology

Out with the proprietary software and in with open source. Moving to Ubuntu is proving to be an excellent decision by Oxford Archaeology.

"Ubuntu is the most open of open source distributions."

Chris Puttick,

CIO of Oxford Archaeology

## Background

Oxford Archaeology, as its name implies, is no high-tech newbie.

The company, self described as an expert in excavation and heritage management, was founded in 1973 in Oxford, England and has been expanding globally ever since. Clients include the United Kingdom's Royal Household, Ministry of Defence and Highways Agency as well as UNESCO, British Petroleum, Oxford University and the Ministries of Culture for France, Turkey and Nepal.

Its job is to evaluate the impact of development on historical and archaeological artefacts and protect and preserve those that could be affected by it. It has participated in projects in venues as exalted as Buckingham Palace and Windsor Castle as well as Murray's Mill, the oldest surviving cotton mill in Manchester, and Château de Mayenne in France.

According to Oxford Archaeology's website, its personnel are there to "record, protect and preserve remains of past human activity, and help people to get better access to and more enjoyment from their heritage."

But don't let its historical mandate fool you as the organisation has become a high-tech entrepreneur. Its tools portfolio includes desktop and portable GIS systems, web mapping servers, and geospatial databases.

One of the largest companies of its kind, it employs over 300 specialists and has offices in Oxford and Lancaster, UK and Montpelier, France.

"We chose Ubuntu as our primary operating system because it provides maximum choice (least lock-in) compared to the other operating systems available. Plus it gives us maximum choice compared to the different Linux distributions."

Chris Puttick,

CIO of Oxford Archaeology

## Business challenge

To achieve its goal of logging and preserving artefacts, Oxford Archaeology seeks out, evaluates and uses the best and most cost-effective technologies.

Towards that end, the company has been migrating to a completely open source stack for desktop and server-side applications, says Chris Puttick, Chief Information Officer.

One issue is that the group comprises of and was historically run by archaeologists, and archaeology is a pretty academic subject. Put simply: their core competence is not software and networking. "Companies like ours [typically] employ an archaeologist regardless of job function," says Puttick.

Puttick, an IS Management professional who joined the organisation two years ago, is changing that. He has an aggressive plan to swap out pretty much all of the organisation's proprietary, commercial software, including Microsoft Office(TM), for open source alternatives.

## Ubuntu solution

Puttick firmly believes that open source solutions are the only answer given the long-term costs of proprietary stacks. Especially Microsoft's so-called integrated stack, which includes the operating system and tools up through the application layer.

In short, he is convinced that putting all of an organisation's eggs in one Microsoft basket is simply too expensive. "I have a long-term outlook...I'm into open source because it's the long-term answer rather than closed software which is the short-term answer," he says.

Depending on how closely an organisation has tied itself to the Microsoft stack, Puttick says, "the cost of getting yourself out of that later can be too high. At some point you have to make that decision."

For Oxford Archaeology the emerging stack is a virtual roadmap to the open source computing world. The company currently runs Ubuntu 6.06, and also 7.04 and 7.10 releases. On his desktop he's running Kubuntu 7.10.

The organisation is moving to OpenOffice.org, although that migration is about halfway done, the  people still using Microsoft Office 97 will have an easy transition to OpenOffice. "People using Windows XP or 2000 will continue use until the rest of the migration is complete, and then will be slowly migrated to Ubuntu desktops or thin clients," Puttick says.

Zimbra, the open source e-mail package recently acquired by Yahoo, is Oxford Archaeology's e-mail solution. For databases, the organisation relies primarily on PostgreSQL, because of its enterprise capabilities and scalability and the availability of the PostGIS plug-in for geospatial applications. Development types use tool sets such as the Yahoo User Interface Library. Firefox is the standard web browser for internal use.

For specialised mapping and geographical systems, the company currently uses Esri products, but in the future they plan to move to an open source Spatial Data Infrastructure, using a mix of GRASS or Geographic Resources Analysis Support System, QGIS and PostGIS.

“As for the selection of Ubuntu over other Linux distributions,” Puttick says, “that was straightforward because Ubuntu is the most open of the open source distributions.”

“We stress openness and sharing in terms of archaeological data and solutions and we wanted to stay true to that philosophy. SUSE and Red Hat have chosen a separation of the community versions vs. commercial versions and that just makes openness more difficult,” he says.

Puttick also plans to use Canonical’s support services once their migration to Ubuntu 8.04, or what he calls “the killer server,” is finished and up and running.

## Result

Oxford Archeology is well on its way to a full soup-to-nuts open source stack, eliminating Microsoft software even on the desktops. That will cut its software and hardware costs and any dependence on a single technology provider.

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