



Open source your way to the future

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Many companies are looking at cutting costs while still being able to produce software, manage their information and support their clients at higher levels. Spending large amounts of money on systems to be able to do this, along with the inevitable upgrade costs for newer versions with features that are imperative to the end-user, seems to be a never-ending cycle. Well, there is a possible escape from this cycle – to look at the open source movement.

Yes, open source. Free software, no strings attached. Can't be good can it – it is free after all? Who in their right mind would want to develop software for free? Well, there are actually a surprisingly large number of open source tools out there that can, and do make the life of an organization with tight purse strings a lot easier. Why does the open source approach work? For a thought-provoking and interesting read, have a look at Eric S. Raymond's writing on the subject in a very interesting piece entitled 'The cathedral and the bazaar', found at <http://www.tuxedo.org/~esr/writings/cathedral-bazaar/>.

Still not convinced after reading the above piece that open source software may be worthwhile? Or wondering where one would go to find the gems among the open source movement? Well, let us take a look at some specific applications and requirements that may be found within an organization and for which an open source tool may be ideal.

Many companies have a requirement to store information in a neutral format – and many have chosen to store it using Extended Markup Language (XML). If the information quantity is high, a database system to handle storage and retrieval is a must. One can use the staple of the business world – a relational database – but then the manipulation of the XML elements themselves (equivalent to column and row manipulation on a relational database) becomes a problem. One can buy an XML database or install a relational or XML bridge. Or one can simply download the Xindice native XML database from <http://xml.apache.org/xindice/> and not be concerned about translating the XML information into other formats.

Suppose the company has now installed Xindice and has huge amounts of information stored in an XML format. There are now requirements to display the information on a Web browser (easy since it is XML based) to produce flashy reports that must be printed and/or produced as softcopy documents. Look no further than another open source Apache tool, namely FOP or Formatting Object Processor, found at <http://xml.apache.org/fop/>. FOP allows one to take information and render it to a wide variety of formats, including PDF, text, straight to the printer and even into a java GUI panel, using a style sheet. The power of this approach and tool cannot be described within this column, but suffice it to say that with a single style sheet one can target a wide variety of output formats.

A column like this would be incomplete without mentioning one of the best Web servers that one can find, namely Apache's HTTP Server. Serving as the basis for other

(specialized) servers such as JBOSS (also free) and WebSphere, you can find this gem at <http://httpd.apache.org/>. If you need a platform to run on, Linux as an open source product is known to everyone. There are even open source office products available (have a look at OpenOffice's Web site at <http://www.openoffice.org/>) for the user who requires a complete free office productivity tool.

More specialized development open source tools also exist, such as persistence brokers for databases, template engines for reporting and XML parsers. For a look at an impressive array of open source products, check out the main Apache site at <http://www.apache.org>, as well as <http://www.sourceforge.net>. Even some of the big name companies are getting in on the action – see <http://www-106.ibm.com/developerworks/>. Bear in mind that some of the sites are aimed at developers and provide development tools.

Open source products exist and are viable alternatives that should be seriously investigated and considered for deployment. They can ease the flow and manipulation of information within a company and open up new alternatives to companies and their clients.

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