

Sybase Builds on Apple's

With the Unix-based OS X, Apple has entered the enterprise arena



Changing times require innovative solutions. In today's economic environment—especially the economic environment of most information technology (IT) departments—like it or not, the most compelling case for innovation is cost cutting.

Although Apple Computer has not customarily been known for offering cost-saving solutions, few companies have a track record for innovation that can come close to Apple's. Apple, however, is rarely mentioned in the context of enterprise-level information technology.

But things have changed: Thanks to Apple's latest operating system, OS X, being built on a Unix foundation, Apple has entered the enterprise market with a cost-effective, high-performance rack-mounted server called the Xserve. The good news for database developers is that Sybase has successfully and rapidly deployed Adaptive Server Enterprise (ASE) 12.5 for the Mac OS X platform. So it's time for IT directors to take a fresh look at the Mac platform.

A Shift in the Wind

Among the most visible evidence that the Mac is crossing over to serious IT audiences is the business shift of respected techni-

OS X Enterprise Entry

cal book publisher O'Reilly & Associates. Not only is O'Reilly's *Mac OS X: The Missing Manual* its best-selling title since its 1993 release of *The Whole Internet User's Guide & Catalog* but it has also recently held the O'Reilly OS X Conference and published *Mac OS X for Unix Developers* and *Learning Unix for Mac OS X*, among other books.

Tim O'Reilly, an Open Source evangelist and the founder and president of O'Reilly & Associates, says that "the Mac is a fantastic platform with the future built in." He adds that Mac laptops, because they offer a fully functional Unix environment plus full support for office applications, have clearly become "the alpha geeks' computer of choice." He adds, "I find it fascinating to see the Mac moving to a Unix foundation and wonder what that marriage will enable."

Enter Sybase

By supporting the Mac with the new OS X version of ASE, Sybase is opening up new opportunities for value-conscious enterprises seeking more cost-effective ways to build and serve mission-critical applications. Dr. Raj Nathan, senior vice president and general manager of Sybase's Enterprise Solutions division, says, "We are committed to becoming the standard enterprise database running on Mac OS X. Not only are we impressed with Mac OS X and its user friendly capabilities but we are equally impressed with Apple's new generation of servers."

That commitment was supported by the Sybase engineering team that brought the Mac version of ASE to market in only five months. Perhaps the highlight of ASE for OS X's development was a glitch-free demo of a fantasy NBA basketball application (see screen shot), which its creators built in less than one week by using Apple's WebObjects rapid application development platform. Apple CEO Steve Jobs touted that Sybase ASE for OS X database-based application last May at the Apple World Wide

Developer Conference (WWDC) at the original announcement of Apple's Xserve.

There is another indicator of interest in the new approach to low cost of ownership for enterprise database applications



Demo of a fantasy NBA basketball application, which its creators built in less than one week.

and servers that Sybase's ASE for Mac OS X represents: a reported "more than 2,000 downloads" of the free developer edition since it became available last fall.

Easing into the Enterprise

Although the combination of a Unix-based, low-cost, high-performance server with an industrial-strength database application from Sybase is attractive, Sybase

FIND OUT:

- Why the Apple OS platform is ready for the enterprise
- How Sybase is taking advantage of the Mac's legendary ease of use
- Why Apple's Rendezvous technology represents a significant advance

WHY READ THIS?

alone cannot overcome the perception that the Mac is not an enterprise machine. On the other hand, some of Apple's hardware tests may turn some tech heads. Benchmark testing is showing that Apple's Xserve 1U rack-mounted server is on a par with, and in some cases faster than, more expensive machines from Dell, Sun, and HP. (See <http://www.apple.com/xserve/> and download the benchmark PDF to read details of Apple's comparative tests.)

To further reduce costs, OS X includes an unlimited client license with no per-user costs. Darryl Salas, Sybase's partner program manager, points out that the Macintosh's legendary ease of use also reduces total cost of ownership. Salas says that using Sybase on Apple's platform provides cost- and time-saving features for IT personnel, such as remote database management and monitoring, easy installation, low maintenance costs, and online database maintenance.

So Easy That "Something Must Be Wrong"

Steve Olson, the Sybase engineering director responsible for the Mac initiative, points out that during the testing phase of Sybase ASE for OS X's development, one of the testers found that the installation had gone "so quickly and easily" that he "wondered if something had gone wrong."

In addition, Sybase is doing everything it can to support the migration of existing database applications to ASE for OS X. Watch for the release of a full set of migration tools this winter.

For those who want to take advantage of Apple's WebObjects rapid application development platform, WebObjects 5.2 now ships with a plug-in that makes WebObjects output compatible with ASE.

In fact, Sybase is planning a "Switch" ad campaign inspired by Apple's own "Switch" TV ads. Sybase's effort is targeted particularly at users of Microsoft SQL on Microsoft

servers. The source code in Microsoft SQL was originally licensed from Sybase and codeveloped for many years. Sybase's Salas points out that "the full 18 years of Sybase's mature and stable database code development are now available with the Mac's ease of use." Sybase's campaign will underscore the lower total cost of ownership and higher reliability of Apple's Unix-based hardware.

The Xserve is a first-generation server from Apple, intended for small to midsize businesses. As such, its physical constraints (two CPUs, 2 gigabytes of memory) may make it unsuitable for applications requiring heavy online transaction processing (OLTP). Nevertheless, Olson reports that ASE can support approximately 1,000 simultaneous users per CPU on this platform.

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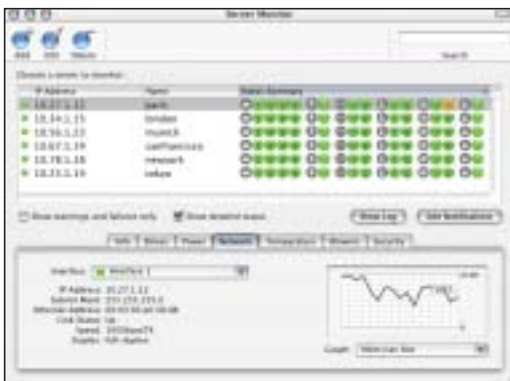
New Networked Environments

One of the key features of OS X that goes beyond the user friendly interface is the new Mac OS's ability to make it as painless as possible for multiple platforms to coexist on one network. Despite all its other advantages, Linux—the other low-cost platform that has attracted the most interest among



IT professionals—has so far failed to address the challenges of networked platform compatibility.

Apple, on the other hand, has achieved what many consider to be a true breakthrough with the Rendezvous technology that is built into OS X. Mac OS X Server provides cross-platform support for native file sharing, as well as for Apache Web server and WebDAV server, FTP, DNS, and DHCP—right out of the box. In other words, Windows users instantaneously see a server in their usual “Network Neighborhood,” and Unix and Linux users can access file services via NFS, FTP, or WebDAV, without having to install additional client software.



OS X Server Administration Screen

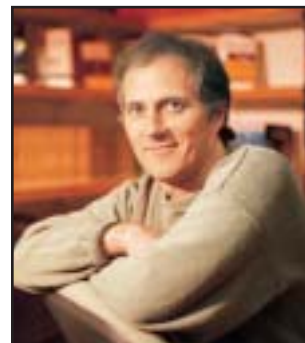
Incredibly Innovative

And Rendezvous applies to database calls as well. Sybase's Nathan calls Rendezvous “an incredibly innovative technology that we are using to combine the best of both worlds—Sybase's high-performance, scalable database with Apple's legendary ease of use.” He continues, “As the first enterprise company to support Rendezvous technology, Sybase, with Adaptive Server Enterprise 12.5 for Jaguar (OS X 10.2) Server, makes client discovery and server configuration automatic, lowering the cost of ownership for our customers.”

O'Reilly & Associates' Tim O'Reilly calls Rendezvous a “significant technology,” because of the way it extends network computing, not only via the Internet but also via cell phones and all kinds of appliances. He says Rendezvous will enable “ad hoc computing,” in which con-

figuration is no longer the barrier it once was, and he speaks of an instant network of Mac users at the O'Reilly OS X conference who were able to share files instantaneously via OS X's iChat application.

For Sybase, OS X and Rendezvous open enormous new possibilities for the rapid deployment of Web and other database applications at a remarkably lower cost of entry. (Look for specific cost comparisons as part of Sybase's “Switch” campaign, coming soon.)



Tim O'Reilly of O'Reilly & Associates

The bottom line for Sybase customers is that Apple has suddenly become a major new player in the network server marketplace and is offering unprecedented ease of use; Unix reliability; cross-platform compatibility; cost-effective, high-performance hardware; and, with Sybase ASE for OS X, software maturity, enterprise-level database performance, and world-class support.

It's hard not to agree with O'Reilly that it's going to be “fascinating to see what this marriage will enable.” □

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