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Sybase TechWave 2004!

TechWave 2004 Kicks-off – August 15th

As an IT professional you live in world where data and information need to flow freely. You're responsible for making the information immediately accessible in a format that can turn it into economic benefit from wherever you or your team members are; whether sitting at a desk on your intranet, visiting on a remote production floor, or out in the field without a phone in sight. This is the Unwired Enterprise and Sybase can help you get there today. As Sybase Celebrates 20 Years of Innovation in the information technology industry; TechWave 2004 has prepared a comprehensive program covering everything from our ground-breaking beginnings through the advances of today. These highly technical classes provide an added opportunity for you to explore Sybase technology while expanding your knowledge and skills.

Search All Conference Sessions

[Click here](#) to search for classes by session type, track, audience, product focus, skill level, or schedule.

View All Conference Sessions

[Click here](#) to view a detailed list of all conference sessions.

TechWave Sessions separated into three separate segments, each with a distinct value proposition.

PRE-CONFERENCE TRAINING

Arrive early and take advantage of the Saturday and Sunday Pre-Conference two-day courses. Choose from eleven Sybase Education courses that have been formatted specifically for this unique training opportunity. Each is complete with hands-on, instructor-led training and full labs. Note: There is an additional registration fee for Pre-Conference Training

AM EDUCATION

These 5 to 10 lectures stretch across two or four mornings. Adapted from Sybase Education or developed especially for TechWave by Sybase engineers these classes include lab materials for the product releases being instructed when available. This intensive training allows you to return to your office with better skills than when you left. An incredibly high value proposition not available anywhere else.

PM TECHNICAL BREAKOUT LECTURES

We reviewed hundreds of applications from the extended Sybase family and chose the very best. There are over 150 separate sessions to choose from. These 60 or 90 minute lectures focus on specific topics, customer success stories, partner solutions, and real-world code you can walk away with and use immediately. [The 13 conference tracks](#) contain something for anyone in the IT industry using Sybase. The sessions have been put into our conference database so you can search for the lectures that suit you best. [Session Search Page](#)

You can still Register for TechWave 2004 at: <http://www.sybase.com/detail?id=1013372>

If you're unable to attend TechWave this year and would like to get information on a specific conference topic/session, contact you're Sybase Account Team. They may be able to arrange for a presentation, demo and/or discussion of a TechWave topic/session for management and staff at your location.



Sybase® Adaptive Server Enterprise on Linux/Itanium2 Benchmark Performance Study

ASE on Linux/Itanium2 - about 10% faster than Oracle on comparable hardware!

Linux has created a huge new playing field for enterprises, academia, and governments across the board—namely the opportunity to replace proprietary systems with lower cost commodity platforms.

Benchmark Performance Study Sybase Adaptive Server Enterprise (ASE) on Linux/Itanium2

Enterprise-class performance for Linux/Itanium2

A Sybase and HP joint initiative



Until recently, concerns around support or lack of applications have stopped many enterprises from strategic, wholesale migrations to Linux. Recent advances of Intel performance and the broad-scale support of hardware and software vendors indicate growing comfort and adoption of Linux (see Forrester, "The Linux Tipping Point," March 2003). High-performance, mission-critical systems running on Linux has become a reality.

Sybase has been an innovator on Linux since 1999, when the company's flagship database was released for the Linux platform. Today, all core Sybase products run on Linux including: Adaptive Server Enterprise, Open Client/Server, EAServer, Replication Server, Open Switch, Sybase IQ, Financial Fusion and SQL Anywhere Studio.

Sybase is the infrastructure for mission-critical, transaction intensive applications for inherent performance advantages. To support customers in their efforts to further reduce the costs of these traditionally high-end applications—yet maintain high-end performance and scalability—Sybase and Hewlett-Packard recently conducted internal benchmark tests with Adaptive Server Enterprise on Linux/Itanium2 at Dublin, California performance laboratories. The first such benchmark on an SMP configuration, Sybase continues to lead the way for Linux innovation and enterprise-class processing capability.

Hewlett-Packard is a leading provider of server class systems, built using Intel® Itanium® 2 processors. Intel® Itanium® 2 are ideal for high performance computing and compute-intensive custom applications where price and performance are key factors. The systems are uniquely designed for large-scale enterprise and database applications. These systems enable businesses and organizations to maximize their return on investments by delivering industry-leading performance at relatively lower cost.

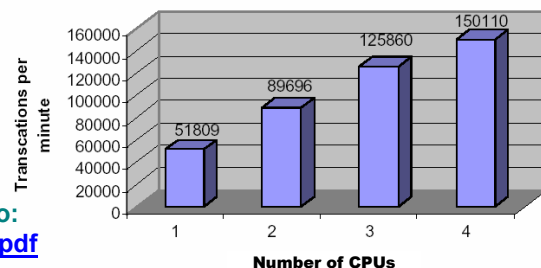
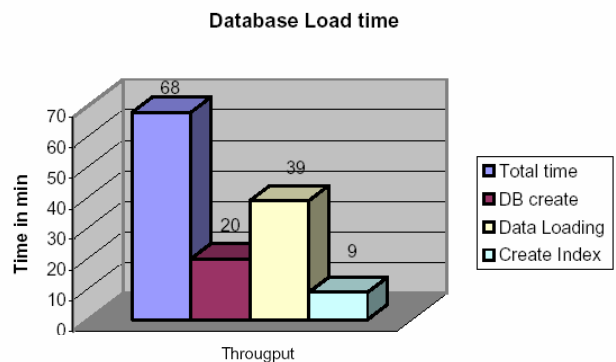
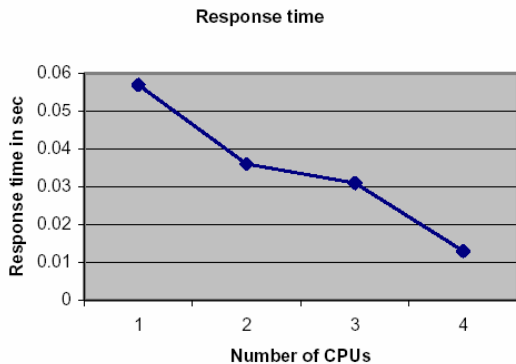
Sybase Adaptive Server Enterprise (ASE) demonstrated superior performance results. This benchmark validates Sybase ASE's suitability for running transaction-intensive workloads on lower-cost platforms.

- 51809 Transactions/Minute using single 1.5Ghz Intel® Itanium® 2 CPU.
- Demonstrated exceptional scalability from 52K Transactions/Minute on one CPU to 150K Transactions/Minute on four 1.5Ghz Intel® Itanium® 2 CPU.
- 13 milliseconds average response time on a four CPU system.
- Consistent throughput with sustained operations.

The Sybase/HP benchmark environment tested database entries to represent up to 50,000 front-end users using 135 dedicated database user connections. This was designed to ensure scalability while continuing to maintain throughput performance statistics.

Each test ran for one hour for three consecutive hours. So, over a 24-hour period, each test series repeated eight times. The design was to supply a constant flow of information over and over, testing the performance numbers at each session's end.

The test database was approximately 180GB in size, with eight tables and several indexes within these tables. Initial data was 72GB, and entire loading was achieved in about an hour.

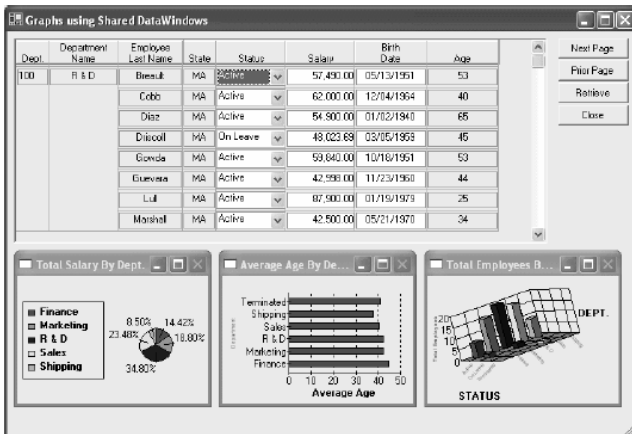


For a complete copy of the benchmark whitepaper, please go to:
http://www.sybase.com/content/1031301/IA64_Benchmark_wp.pdf

Sybase Dramatically Simplifies .NET Application Development with DataWindow .NET

Application Development Tool Accelerates the Creation of Enterprise-Class, Data-Driven Applications Built on the Microsoft .NET Framework

- Sybase, Inc. announces availability of Sybase® DataWindow® .NET, a patented technology designed to simplify application development for the Microsoft® .NET developer community.
- With 4GL power, Sybase DataWindow .NET significantly reduces development time, coding and the need for deep knowledge of complex data access methods and SQL queries.
- Sybase DataWindow .NET enables development of enterprise applications that can be quickly adapted to changing business needs, ensuring the right information is available to the right people at the right time.



This form is in one of the Visual Studio .NET solutions that you can find in the *Samples* directory on the DataWindow .NET CD.

Sybase DataWindow .NET delivers workhorse data access and presentation capabilities — virtually code free. A user-friendly point-and-click environment enables easy data retrieval and modification, allowing developers to quickly incorporate complex business logic into applications and to modify it when business needs change. Sybase DataWindow .NET is engineered for developers using Microsoft Visual Studio® .NET, Borland® C#Builder™, or any other development environment that supports the Microsoft .NET Framework.

“Today, developers need to do more with fewer resources, deliver under tighter deadlines and incorporate data from many disparate sources in their end-user applications,” said Dr. Raj Nathan, senior vice president, Information Technology and Solutions Group at Sybase. “Sybase DataWindow .NET addresses all these demands in a single tool, giving developers the power to quickly and easily incorporate data access, complex logic and data presentation into all .NET applications. Additionally, this aligns with Sybase’s mission to provide open standards technology by supporting additional platforms and giving developers more choices to work with.”

“Sybase DataWindow .NET is an important adjunct to the Microsoft .NET Framework,” said Rikki Kirzner, director, Application Development and Deployment, IDC, a leading provider of global IT research and advice. “DataWindow .NET’s holistic approach should help developers be more productive, and should allow faster and more flexible modification of enterprise applications for the .NET environment, particularly since developers can redeploy the same DataWindows to n-tier and mobile platforms.”

The Sybase Developer Network (SDN) offers in-depth support to help developers get the most from DataWindow .NET and other Sybase tools through free trial software, technical information, and collaboration with other Sybase developers. SDN continues to expand developer services including CodeXchange, where developers can work together on open source code or start collaborative projects with their peers. For more information about the network, or to join, please visit:

<http://www.sybase.com/developer> .

Pricing and Availability

Sybase DataWindow .NET is available now and priced at \$695, plus \$150 per year for the Update Subscription Plan (USP) — an annual plan providing automatic delivery of software version upgrades. For more information, or to place an order, please call 1-800-8-SYBASE, or visit <http://www.sybase.com/datawindow.net> .

iAnywhere Introduces New Application Messaging Technology In SQL Anywhere Studio

New QAnywhere™ technology provides a comprehensive store and forward messaging solution for mobile users, expanding options for enterprise integration.

iAnywhere Solutions, Inc., a subsidiary of Sybase, Inc., unveils QAnywhere, a robust application-to-application messaging technology within SQL Anywhere® Studio, the industry-leading data management and enterprise synchronization solution for anywhere, anytime access to corporate information.

QAnywhere facilitates the development of mobile applications that easily integrate with back-end enterprise application servers and messaging systems that support Sun's Java Message Service (JMS). QAnywhere broadens a SQL Anywhere developer's options for easily integrating enterprise systems with their mobile database applications.

"Application developers are increasingly being asked to integrate with a variety of back-end systems, as customers want to ensure that new solutions preserve previous investments in applications," said Chris Kleisath, senior director of engineering at iAnywhere Solutions. "The QAnywhere messaging technology extends and complements SQL Anywhere's ability to integrate with enterprise systems via data synchronization, XML or Web Services. With QAnywhere, developers that have been using SQL Anywhere Studio for data synchronization can now easily extend their application infrastructure to accommodate messaging - reducing administration requirements and simplifying deployment."

QAnywhere Overview

QAnywhere leverages extended functionality in SQL Anywhere's MobiLink synchronization server that allows it to function as a messaging server. QAnywhere enables application developers to enhance the functionality of their deployments by reliably sending and receiving messages between mobile applications and enterprise systems. QAnywhere offers the following features and benefits to developers:

A comprehensive messaging API provides a powerful and flexible programming model for building mobile messaging applications.

- Transmission rules optimize the performance, cost, and bandwidth of message delivery.
- Support for transactions and message compression ensures reliable and efficient message delivery.
- Encryption of messages during storage and transmission results in strong mobile device security.
- Push notification of messages waiting to be delivered enables mobile users to receive critical information in a timely manner.
- Connectors to back-end JMS-based enterprise systems facilitate seamless integration for mobile messaging applications without extensive programming.

"Mobile applications often need to exchange data with both back-end databases and messaging-based systems. In either case, the mobile applications must work whether online or offline and deal with unreliable wireless network coverage and dropped connections," said Larry Trainer, Vice President of Engineering, ELEVEN Technology. "QAnywhere simplifies the extension of messaging systems to mobile users and efficiently supports a variety of different networks with resumable downloads, message compression and push notification. In addition, QAnywhere's support for transmission rules allows the mobile user to make more appropriate use of wireless networks with the flexibility to send and receive messages only when really necessary."

Availability

QAnywhere is available immediately in SQL Anywhere Studio 9.0.1. Developers can visit www.iAnywhere.com/qanywhere to download the free SQL Anywhere Developer Edition and to register for a QAnywhere technical webcast.

About SQL Anywhere Studio

SQL Anywhere Studio is a comprehensive package that provides data management and enterprise data synchronization, enabling the rapid development and deployment of database-powered applications. With more than 8 million deployed seats, SQL Anywhere Studio powers embedded database applications in desktop, server, mobile and remote office environments.

About iAnywhere

iAnywhere is the worldwide market leader in mobile and embedded databases, mobile middleware and mobile and remote device management. More than 15,000 customers and 1,000 partners rely on the company's award-winning enterprise products, including SQL Anywhere® Studio and XcelleNet frontline solutions. In addition, its AvantGo® mobile Internet service has more than ten million registered subscribers. iAnywhere is a subsidiary of Sybase, Inc. (NYSE: SY). Visit www.iAnywhere.com for more information.

AARP — Membership Application

Provide optimum response time and eliminate potential failure points in AARP's membership applications.

Performance and Simplicity from 2-Tier Architecture

The American Association of Retired Persons (AARP), with 45 million members, is one of the most potent political forces in the United States. AARP is a nonprofit, nonpartisan membership organization dedicated to making life better for people 50 and over. AARP serves its members in multiple capacities including as a legislative watchdog for the rights of senior citizens and as a buying organization for volume discounts on medicines and insurance. Accurate tracking of its membership rolls is essential for the organization to provide these services.

In the United States, 55+ households are the fastest growing user segment to embrace computer technology. AARP delivers membership management interfaces to users of all comfort levels by providing Web and call center access. AARP also has business partners that deliver additional services to AARP members.

AARP's membership information is stored in a DB2 database running on an IBM mainframe, processing approximately 1 million transactions per day. To service its members and affiliated business partners, AARP had been running a 3-tier architecture. While the architecture worked, AARP believed the performance could be improved because the middle tier added extra hops in the connection process. AARP also wanted to reduce their potential downtime exposure by simplifying the architecture. AARP membership is on the rise, and in a quest to insure continued stability and upgrade the response time for all users, the AARP development team began searching for solutions.

Excising the Middle Tier

During the course of their investigation, the team talked to Sybase. AARP's membership application was written in **Sybase PowerBuilder** and portions of their existing 3-tier solution relied on Sybase technology. When Sybase proposed a 2-tier architecture, the AARP team was intrigued. Milliseconds add up, and a primary advantage of a two-tier environment is the increased throughput from having fewer intermediate points involved in each connection. Also, a 2-tier approach is a simpler architecture requiring less administrative time to install and maintain.

Nat Arcilla, Senior Consultant at AARP explains the origins of the plan and the proof-of-concept phase, "Sybase Technical Support Engineer Kevin Bates gave us the idea, and it appeared sound, so we built a fairly simple prototype. We changed the SQL.ini file to point to the mainframe. I configured the **Sybase Mainframe Connect** and **Open Server Connect** to be able to receive gateway-less traffic. The prototype worked very well. We showed the results to our management and they gave us a green light to go ahead." The project took less than three months to implement; the most complicated portion of it was coordinating the simultaneous configuration of the 350 workstations used by the call center.

Arcilla explains the call center conversion simplicity, "All we really did was take out the middle layer and have the workstation talk directly to the mainframe. We did not have to replace the workstation client, the client talks with Sybase Mainframe Connect. We only had to modify each workstation's SQL.ini file to tell the Sybase client to connect directly to the mainframe."

Impressive Results

The call center conversion was the first phase of the project and reaped an immediate performance gain. The time required to process each transaction dropped by 50%. The users were thrilled with the improvement in response time and the AARP team was impressed with both the stability of the solution and the ease of conversion. "I didn't know what our performance gain was going to be until we got there," says Nat Arcilla. "The 50% reduction in response time was really phenomenal."

Sybase Mainframe Connect runs on the mainframe and services the connections to the outside world. Initially, the AARP team had some concerns that Sybase Mainframe Connect would negatively impact mainframe performance. They expected to see an acceptable 10% hit on the CPU resources. They were very happy when they measured a mere 3% increase in CPU usage. Sybase Mainframe Connect easily took over the burden normally carried by middleware running on a separate computer. The solution worked very well without negative side effects.

Informed Support with Exceptional Service

Mainframe product support is often the Achilles heel of companies with diverse, multi-platform product offerings. AARP gives high marks to Sybase's support of Mainframe Connect. "The support we get on the mainframe side has been really great; whenever we encounter a problem, Sybase support is right on the ball," says Simon Hu, a Senior Systems Programmer at AARP. "For instance, we had a memory leak bug, and were the only ones that had encountered the problem. The Sybase support people worked with engineering to get a fix out as soon as possible. We had our fix in a week. We just use the regular support at the famous 800 Sybase number."

Future of the Project

The next phase of the AARP project is converting their Web applications to the gateway-less architecture. All Website-based membership activities run through **Sybase EAServer**. Arcilla says, "We are taking a simplistic approach, we have the PowerBuilder membership application running on EAServer which will talk directly to Mainframe Connect. We will also be converting our Web services interface that connects to our business partners. The Web services go to a servlet that calls a PowerBuilder application that will then call the mainframe." AARP is also using **Sybase jConnect** to provide seamless access from Java applications to the mainframe, so soon all web applications will have direct access to the mainframe. Says Arcilla, "We are having great success with our testing, and we look forward to implementing shortly."

ASE 15.0 Beta Program

Call for Beta Participants

Ready for the next big thing? 15.0.

The next major release of Sybase's flagship product, Adaptive Server Enterprise, is getting ready for Beta testing. This release delivers next-generation enterprise data management features. This is your chance to enroll in the Beta program and get a sneak peek at this revolutionary release.

As a Beta program participant, you'll be invited to participate in conference calls hosted by ASE engineers where you will learn all about these new features and where your input will help shape the final release. You will also receive in-depth advice on implementation and access to development team-monitored newsgroups. All Beta participants are also provided advanced copies of the product documentation.

Read the [15.0 Feature Plans](#), the [Beta Program Description](#) and choose the level of participation that best meets your needs.

Special Note: The Adaptive Server Enterprise v 15.0 beta program is pre-release software that has not been fully tested, may contain problems and errors, and is not intended for production use. Statements concerning the production release of Adaptive Server Enterprise v 15.0 are by nature forward-looking statements that involve a number of uncertainties and risks and cannot be guaranteed. Such statements are intended to reflect Sybase's current views with respect to the production release of Adaptive Server Enterprise v 15.0 and may ultimately prove to be incorrect or false. Factors that could cause actual events or results to differ materially include shifts in customer demand, rapid technology changes, competitive factors and unanticipated delays in scheduled product availability. Inclusion of specific functionality in the beta version of Adaptive Server Enterprise v 15.0 does not obligate Sybase to include such functionality in the production version.

Higher than Everest

The future is filled with data; the challenge is managing increasing amounts of it.

Dr. Raj Nathan has seen the future, and it's filled with data. Not just the data we create each year, which would tower a mile above Mount Everest if it were stacked as paper, according to researchers at the University of California, Berkeley. If that towering stack impresses you, says Nathan, Sybase senior vice president, Product and Technology Operations Group, you ain't seen nothing yet.

"What's going to happen in the next generation of technology is that devices will create data that will far exceed the ability of humans to create it," predicts Nathan. This challenge is coming on top of the concerns of high-level executives who tell software vendors that 95 percent of the data their companies produce today is never used again. This is frustrating, because the data sits in the database and enriches storage vendors while the owners are getting no return on their investment. Accessing this data and making it useful for delivering economic value to these decision makers is Nathan's preoccupation. His team's goal is to make information available at the cutting edge, enabling real-time decision making.

From Nathan's remarks it is clear that sensors and radio frequency identification (RFID) tags represent a promising line of business for Sybase and other companies in the wireless market, or, as Sybase puts it, the "business of the Unwired Enterprise." Nathan gives as an example sensors that will create what might be called "always-on children," whose parents or guardians will know in real time where their children are.

Eastman Chemical Company was testing wireless sensors that monitor ultrasonic noise to detect steam and gas leaks at its plant in Tennessee, reported Dave Hrivnak, Eastman's mobile projects manager, in the March 2004 issue of the journal Chemical Processing. "They reduce the installation cost and time, compared to traditional wired sensors," he writes. The global market for sensors alone will reach more than \$50 billion in 2008, according to the Swiss firm Intechno Consulting.

Godzilla Visions

Nathan's point is that tags will add more and higher Everests of data, creating Godzilla-like visions of information overload. Intelligent sensors communicating among themselves to automatically process data are a potential solution, but smart tags and electronic eyes will need to use software to make sense of the vast amount of data they deliver.

Sybase is already helping enterprises to take the step of linking their back-end intelligence systems to the Internet and beyond by wireless, so that critical information can find their workers anywhere, anytime.

"The world without wires is the future that is almost here," writes William Wheeler in his book Integrating Wireless Technology in the Enterprise. Sybase launched a campaign this year to emphasize its leadership in the world of mobile technology, notably in partnership with Intel, offering early adopters an opportunity to challenge competitors while pressing entrenched companies to consider buying the same technology.

Sybase's Intel partnership is warmly received among information technology industry observers, notably in the META Group's March 2004 META Delta newsletter. "Intel needed to show actual customers using its Centrino mobile technology and tapped Sybase for an unwired developer tour that highlighted Sybase products and solutions," writes Jack Gold, the newsletter's author. In collaborating with Intel on the Unwired Enterprise initiative, Sybase is also optimizing its software for Intel processors.

In addition, Sybase has rolled out the Sybase Unwired Server. This new product draws on many of Sybase's existing information development, management, movement, integration, and mobile technologies. It combines them with new technologies, to enable corporations to move to the Unwired Enterprise as quickly, easily, and successfully as possible.