SAP Solution in Detail
SAP Technology

SAP Sybase Adaptive Server Enterprise

Road Map to SAP® Sybase® Adaptive Server® Enterprise

The Best-Run Businesses Run SAP™

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Summary

The integration of SAP® Business Suite applications with SAP Sybase® Adaptive Server® Enterprise (SAP Sybase ASE) delivers unprecedented value and a real-time platform for next-generation applications. It provides an extreme transaction processing environment that can support tens of thousands of concurrent users with high performance on cost-effective, standards-based platforms. A fast, simple migration process to SAP Sybase ASE can be completed in a matter of weeks.

Business Challenges

- Support growing volume of transactions for mission-critical applications
- Guarantee data security, reliability, and integrity
- Keep maintenance and administrative costs low
- Minimize support risks and simplify system administration
- Protect current IT investments and provide a road map to future technology adoption
- Complete database migration in only a few weeks

Key Features

- **High performance** – Gain predictable, consistent, and scalable applications
- **Data compression** – Reduce storage requirements for relational and unstructured data
- **Integrated administration** – Simplify database monitoring, management, and maintenance

Business Benefits

- **Faster processing** with millions of transactions per minute on large and growing databases
- **Low total cost of ownership** through efficient use of storage, processors, and staff resources
- **Greater efficiency** with applications and database optimized to work together and managed from a single interface
- **Lower support costs** due to synchronized product release cycles that avoid unnecessary upgrades
- **Simplified business and deployment planning** with a single vendor for database, applications, and support
- **Proven road map** for smooth, quick, and cost-effective migration

For More Information

Call your SAP representative, or visit us online at www.sap.com.

Responsiveness. Reliability. Results. These have always been the demands enterprises place on their business applications. But today's competitive market landscape has added a new demand: real time. SAP offers a comprehensive database architecture that can meet your real-time requirements – now and into the future.

Organizations are under relentless pressure to push transaction-based business applications to their limits. Data volumes are exploding. User populations are growing and increasingly mobile. Application performance and reliability expectations are rising. In this environment, you must critically evaluate the underlying database for each of your business applications. SAP has built a database platform with real-time requirements in mind. SAP® Sybase® Adaptive Server® Enterprise (SAP Sybase ASE), the SAP HANA® platform, SAP Sybase IQ server, and SAP Sybase SQL Anywhere® solutions help deliver the performance levels your business demands. With SAP Sybase ASE, users of SAP Business Suite applications will find the underlying database offers optimized performance, better reliability, and increased productivity.

As an optimized relational database management system (RDBMS), SAP Sybase ASE is designed for high-performance transaction-based applications involving massive amounts of data and countless users. Our strategic database vision has helped propel us to be one of the world's fastest-growing database companies.

This paper presents a compelling case as to why you should consider SAP Sybase ASE as the RDBMS of choice for your transactional applications. We discuss how you can quickly migrate to the new database with minimal disruption and cost. With SAP Sybase ASE as the foundation for your SAP Business Suite applications, your company can improve overall data management capabilities and achieve efficiencies in application cost, responsiveness, and reliability while setting the stage for future growth.

Your database migration project doesn't need to be a complex endeavor. As the single provider behind all aspects of the software, we understand and can orchestrate your database migration processes – based on thousands of successful implementations around the globe. Migrating to SAP Sybase ASE – with its outstanding performance, excellent value, integration with SAP Business Suite, and rock-solid reliability – is a change that helps you achieve your business goals today while advancing business capabilities well into the future.

Moving to a Real-Time Data Platform for Transaction-Based Applications

MARKET PROVEN FOR MISSION-CRITICAL APPLICATIONS

Innovation through experience has been the deep history of SAP Sybase Adaptive Server Enterprise. Sybase, an SAP company, designed the mission-critical, high-performance RDBMS from the ground up to be the most responsive database for transaction-based applications. Our RDBMS has been validated in the field by more than 30,000 Sybase customers. Perhaps more telling, SAP Sybase ASE powers mission-critical applications for 24 of the world's top 25 banks.

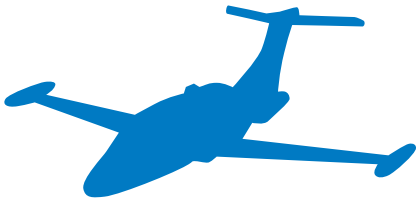
Throughout the years, Sybase has established itself as a valued customer-centric partner in the deployment of vital business applications, as demonstrated by its 97% customer satisfaction rate. In short, SAP Sybase ASE is one of the most reliable, responsive, cost-effective, and easy to maintain databases available, from one of the industry's most innovative leaders.

With SAP Sybase ASE, your demanding IT environment can execute millions of transactions per minute with terabyte-sized databases, while maintaining rapid growth rates in data and transaction volumes for an ever-expanding user population. The software's robust design means that it retains the highest service levels possible, so your business applications remain reliable and responsive under even the most punishing workloads. With its proven scalability, growth ceases to be an IT problem and becomes, instead, a true business opportunity.

Sybase has an unmatched record in designing its databases to leverage advances in CPU performance. As such, SAP Sybase ASE runs fully optimized on the most powerful microprocessors to achieve extreme performance metrics. SAP Sybase ASE executes database queries with lightning-fast responsiveness. For example, using complex dynamic queries that can bring other databases to a crawl, business users can perform the same queries smoothly and quickly using SAP Sybase ASE. By incorporating SAP Sybase ASE into your demanding transactional application environment, your organization gains predictability, consistency, and scalability.

SAP Sybase ASE is the overwhelming choice among users in the performance-dependent, no-downtime-allowed financial services sector. In terms of speed, uptime, and value, the database simply is unparalleled.

SAP's database platform for real-time requirements delivers the performance levels you need, with better reliability and increased productivity. Our vision has helped propel us to be one of the world's fastest-growing database companies.



The SAP Business Suite and SAP Sybase ASE Advantage

The latest release of SAP Sybase ASE enables full-scale integration with SAP Business Suite. Now the database is optimized for increased performance and reliability with SAP's premier business application environment. With the pairing of the two, the top-to-bottom integration of vital business applications with the database infrastructure is in place.

The business benefits of dovetailing SAP Business Suite with SAP Sybase ASE are significant and numerous for today's enterprises. The following is a sampling of the advantages of this powerful integration.

OPTIMIZING FOR SEAMLESS OPERATIONS

Current and future optimizations between the business application side of operations and the enabling database is a priority for SAP. Industry-leading performance functionality drives all system improvements. No other database will be more responsive for SAP Business Suite users than SAP Sybase ASE, because every area of performance improvement is leveraged from both the application and database side by SAP developers.

ENABLING UNIFIED TESTING

A unified testing program means that SAP Business Suite applications and SAP Sybase ASE database management systems are designed to work together, so your deployment happens more quickly – and faster application rollouts translate into accelerated time to value. In addition, our SAP Rapid Deployment solutions offer specific migration software, tools, and best practices, so your SAP Business Suite applications are up and running quickly on SAP Sybase ASE while meeting all specified criteria.

SYNCHRONIZING RELEASES

With both the SAP Business Suite and the SAP Sybase ASE database on synchronized release cycles, this tight integration means that new features and performance enhancements are available at the same time, so your users don't have to wait for separate releases. Your IT group can be confident of maintaining compatibility and not needing to upgrade systems separately, lessening any disruptive effect on your business users.

Additionally, the synchronized releases of SAP Business Suite and SAP Sybase ASE help ensure smooth upgrades for existing applications, greatly improving the process of updating your business environment with the latest functionality. So, when either the database or the application gets a new feature, you can instantly leverage the feature throughout the system.

RESOLVING ISSUES QUICKLY WITH UNIFIED MAINTENANCE

Now you can have a single maintenance program for your organization's applications and the underlying database, eliminating tiresome finger-pointing among vendors. This unified program helps ensure that work done on either the application or the database does not undermine the capabilities of the system as a whole.

SIMPLIFYING MONITORING AND ADMINISTRATION WITH INTEGRATION

With tight integration between SAP Business Suite and SAP Sybase ASE, monitoring and administration is much simpler, allowing you to quickly identify, mitigate, and resolve problems. In fact, your overall system management is more streamlined and effective, resulting in better performance, reliability, and lower cost of ownership.

LEVERAGING SAP'S STRATEGIC VISION

We cannot overstate the following point: Our strategic vision for business applications now fully encompasses the underlying SAP Sybase ASE database. What we have learned from our vast customer network, as well as our profound internal expertise, is now and forever inherent in the database's value to your business users.

Rock-Solid Reliability Equals "Always There" Availability

In the always on, always ready financial services industry, downtime is a disaster. Thus, with its reputation as a rock-solid database, SAP Sybase ASE is a must-have database in that market segment.

Dynamic configuration is a key feature that minimizes unnecessary downtime, allowing your system to adjust to changing conditions in the application environment. For example, caching requirements change automatically to match application requirements.

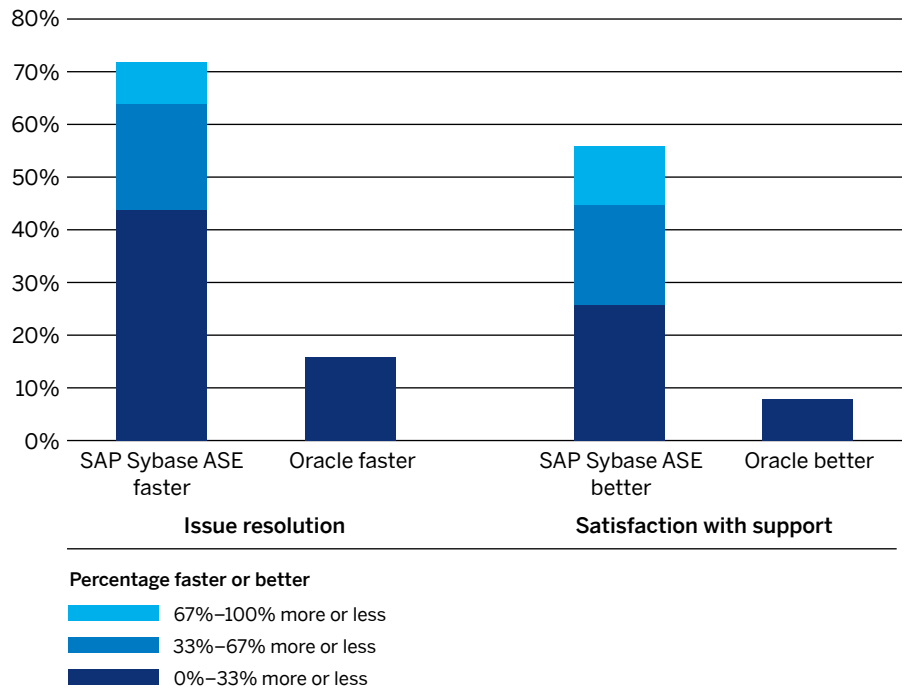
SAP EarlyWatch® services proactively zero in on issues before problems arise. And if issues do arise, integrated alerting functionality identifies the problems and fixes root causes quickly.

An October 2011 study by IDC shows that SAP Sybase ASE saves companies 60 hours annually in unplanned downtime compared to competitive databases. And 2011 research by Bloor reports that 21% of SAP Sybase ASE users had not rebooted their database in two years, while 16% never have had to reboot at all.

Not to be overlooked in any reliability analysis is vendor service and support. In the Bloor study, 55% of respondents said that mean time to repair (MTTR) was faster with Sybase support, while a mere 5% thought the leading competitor was faster at MTTR. Furthermore, users said problem resolution happened faster with Sybase over the leading competitor (72% compared to 16%), and overall they preferred support from Sybase than that of the leading competitor (56% to 8%). See Figure 1.

When it comes to achieving service-level agreements (SLAs), our demonstrated reliability puts SAP Sybase ASE in the driver's seat among databases. Tensions between business users and IT managers over SLAs can be greatly reduced or eliminated entirely when the application infrastructure, such as the SAP Sybase ASE database, consistently meets or exceeds goals.

Figure 1: Greater Satisfaction with SAP® Sybase® Adaptive Server® Enterprise



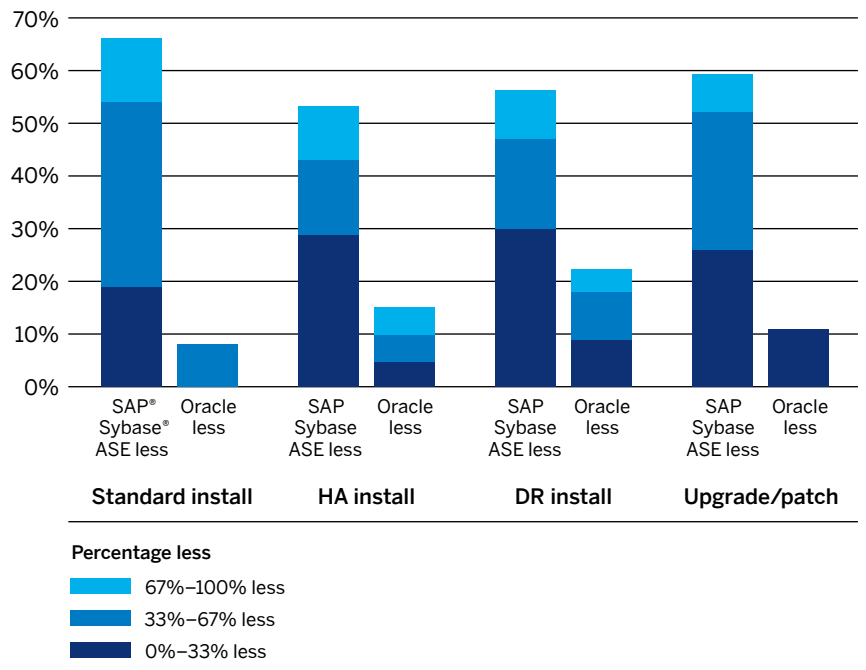
Source: Bloor Research, 2011

ENABLING RELIABILITY THROUGH EASE OF ADMINISTRATION

Ease of administration is central to SAP Sybase ASE reliability. Using a cockpit designed for database administrators (DBAs), you can monitor SAP Business Suite in the same console. The cockpit is an intuitive administrative tool that can be used on-site or remotely, so there's no delay for your DBAs to handle tasks as they occur. Also, SAP Sybase ASE can run routine administrative tasks automatically, greatly reducing DBA workloads.

Ease of administration starts immediately. Whether the business environment requires a standard installation or a high-availability one, your users are likely to prefer working with SAP Sybase ASE. In the field, this has proven true for patching and migration as well. See Figure 2.

Figure 2: Fewer Installation and Patch Issues with SAP Sybase ASE



Source: Bloor Research, 2011

REAL-WORLD MIGRATION: BNP PARIBAS

BNP Paribas Corporate & Investment Banking (CIB) is a globally recognized leader that provides financing, advisory, and capital markets services. The organization's asset liability management and treasury division must ensure that senior management has a real-time view of liquidities and the bank's cash position in order to implement appropriate hedging strategies. To achieve this objective, the division implemented its Worldwide Asset Risk Management (WARM) project, built with a combination of SAP® BusinessObjects™ solutions and SAP Sybase® Adaptive Server® Enterprise. This combination ensures required reliability and security for risk management assessments and guarantees higher analytical decision-making capacity capabilities for senior management. WARM provides a global real-time view of the bank's asset and liability management to enable detailed and responsive decision making at the senior management level.

After the migration, millions of transactions have been entered by the global front office, and more than 2,000 users and over 400,000 deals per month are stored on SAP Sybase Adaptive Server Enterprise transactional databases. These millions of records across five global hubs are replicated in real time in the WARM global data warehouse, which has a data volume of more than two terabytes.

GAINING EFFICIENCIES WITH SAP SYBASE ASE

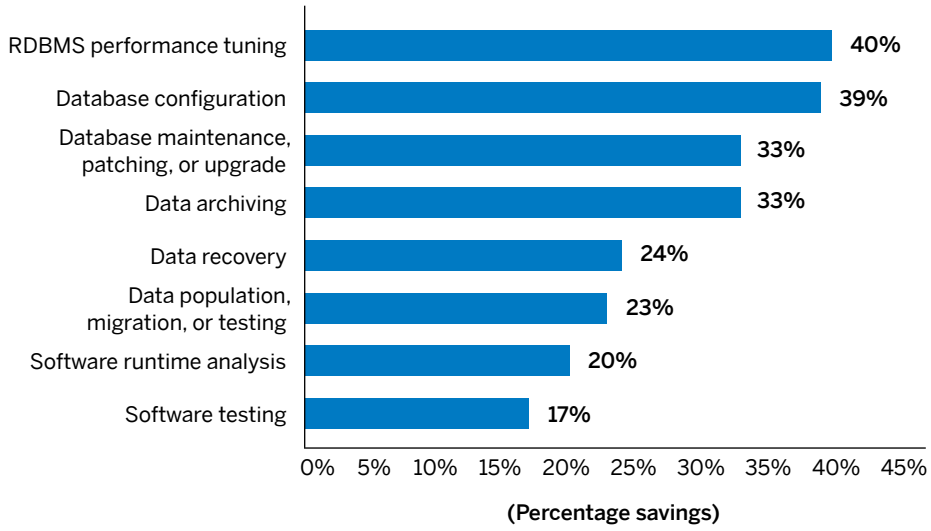
IDC research shows DBAs spend 40% less time working on performance-tuning tasks on SAP Sybase ASE than with other databases. They also work 39% fewer hours configuring the database versus other RDBMS alternatives. Plus, training on SAP Sybase ASE is streamlined so, according to IDC's research, it takes 23% fewer hours to train a DBA on SAP Sybase ASE than on competing systems. As a result, staff resources necessary to support SAP Sybase ASE are reduced by 27% compared with market competitors. See Figure 3.

INCREASING SECURITY

The U.S. Department of Homeland Security's computer emergency readiness team ranks SAP Sybase ASE as the commercial database with the fewest vulnerabilities available today. With SAP Sybase ASE, data is secure when it is being accessed, during transit, and while at rest. SAP Sybase ASE employs row-based access controls so only those authenticated individuals with authority to see the specific information can get to it. Secure socket layer (SSL) cryptography is standard in SAP Sybase ASE to protect data while in flight. And full on-disk encryption means that even if data thieves prove successful, the information will be meaningless and useless to them.

The benefits of solid security are incalculable. First, with fewer security issues, your DBAs spend less time applying patches to systems. Patching can be extremely time consuming, as patches generally require testing before being deployed in production environments. Sometimes misapplied patches can cause performance issues and even unscheduled downtime. Those direct costs can be a drop in the bucket compared to the damage a security breach can inflict on a company's brand reputation.

Figure 3: IT Staff Time Savings with SAP® Sybase® ASE Versus Other RDBMSs



Source: IDC, October 2011

INCREASING VALUE WITH NO-CONTEST COST LEADERSHIP

In addition to the soft savings an enterprise gets from lower staff administration costs and the value of better security, SAP Sybase ASE offers distinct hard cost savings. Those hard savings begin, naturally enough, with hardware.

As shown in Figure 4, IDC research indicates that SAP Sybase ASE requires less storage and fewer CPU resources to achieve its better performance and reliability metrics. Advanced compression capabilities, both on-disk and in-memory, mean users need not overprovision their business applications environment with unnecessary and expensive mass storage systems.

SAP Sybase ASE also is a stingy user of system memory. This is important for two reasons. First, needing less memory cuts basic hardware expenses. Second, and possibly more interesting, it offers additional performance advantages through improved efficiencies in memory buffers and cache.

In one study,[1] IDC pegs the total cost of ownership for SAP Sybase ASE at 28% less than competing databases. In other research,[2] Bloor reports that 75% of those surveyed said SAP Sybase ASE had lower licensing costs than competing RDBMS products. IDC's study quantifies that perception, reporting, "SAP Sybase ASE license costs were 31% less than those of products from other vendors."

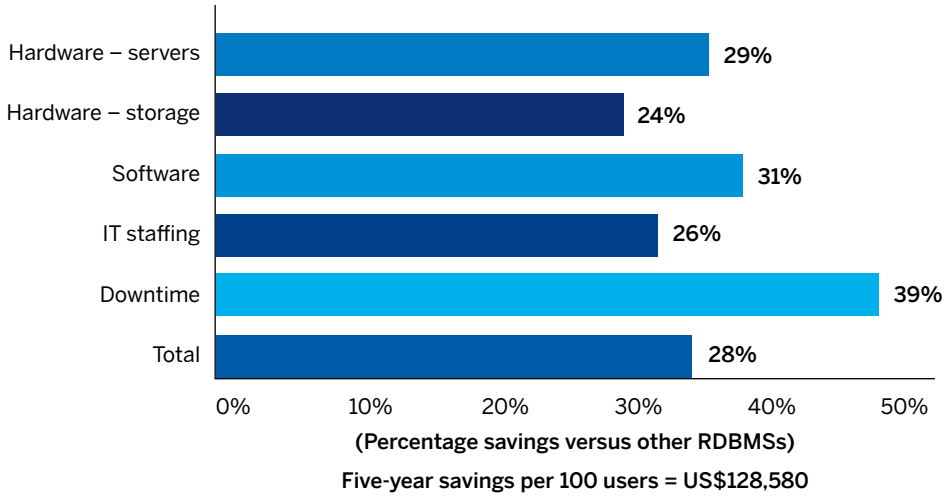
READY FOR MIGRATION

Industry-leading performance. Rock-solid reliability. Unbeatable cost advantages.

These are the critical characteristics built into SAP Sybase Adaptive Server Enterprise. They are part of the many reasons SAP Sybase ASE succeeds in business segments where mission-critical applications must run 24x7.

When your enterprise is ready to embrace these strategic benefits for your SAP Business Suite application environment, the next section provides you with a detailed migration road map.

Figure 4: Total Cost of Ownership Lower with SAP® Sybase® ASE



Source: IDC, October 2011

REAL-WORLD MIGRATION: SOUTH AUSTRALIA HEALTH

South Australia (SA) Health is committed to protecting and improving the health of more than 1.5 million residents by providing leadership in health reform, public health services, health and medical research, policy development, and planning, with an increased focus on well-being, illness prevention, early intervention, and quality care. In metropolitan Adelaide, SA Health has in excess of 2,000 public hospital beds under management. At any time, 250 to 300 patients are being treated in emergency departments and 10,000 patients are on the elective surgery waiting list.

The department replaced two underperforming workflow management systems in its metropolitan hospitals to provide clinical staff and hospital management with better visibility of bed availability, patient flow, and waiting times in its emergency departments. To achieve this goal, SA launched its Operational Business Intelligence (OBI) system. Part of OBI was the migration of data to a new SAP® Sybase® ASE database. OBI enables SA Health not only to manage patient flow significantly better in its hospital network, but OBI's superior reporting properties allow the department to track and validate performance improvement against key performance indicators. Instead of having to wait three weeks for a summary of monthly performance metrics, details can now be accessed almost instantaneously, allowing SA Health and hospital management to be more proactive and plan ahead to avoid bottlenecks.

Customer-Driven Migration Road Map for SAP Sybase ASE

You've recognized the compelling performance, reliability, and value benefits of moving to SAP Sybase ASE as the underlying database for your SAP Business Suite applications. Now the next step is to realize those gains through a migration project. At SAP, we help make it simple for your migration project to be up and running in a matter of weeks (see the sidebars "Leveraging SAP Experience" and "SAP Rapid Deployment Solutions").

In the following pages, we detail a field-proven, step-by-step process for migrating to the SAP Sybase ASE database for your SAP Business Suite environment. The first step along the path is to lay out a customer-driven migration road map.

DESIGNING YOUR ROAD MAP

Migrating to a new database to support SAP Business Suite applications is an important decision that should only be made if the upside of the choice is crystal clear. To achieve that clarity, our detailed road map puts you in the driver's seat during the migration process. Throughout the process, you set the goals and expected metrics for the migration. In every case the strategy belongs to you, but the resulting tactics can be executed either by SAP or you and your team.

Once you have weighed the benefits and risks as part of a thorough assessment of the SAP Business Suite software landscape, begin your road map by evaluating your requirements, so you can establish goals for the migration and determine the scope for your project. The next stage is a comprehensive planning effort, identifying resources, key steps, and timelines. Finally, there is the migration itself, during which the source system is moved to the new target system and rigorously tested to assure it meets your requirements. A postlaunch phase follows to deliver tailored documentation and training. There are also incremental services to consider, such as performance tuning, to ensure your new system provides optimum benefits.

The ultimate goal of the database migration road map is to optimize your business software to its fullest capabilities in order to deliver the greatest value. That's why it is so vital. By driving the process, you can determine exactly what the benefits of database migration are for your business operations.

Our customers depend on our software to run their businesses; therefore, we aim to ensure the successful adoption of technology so that we continue to advance our partnerships. Our long-term

LEVERAGING SAP EXPERIENCE

In any migration of SAP® Business Suite applications, it's important to consider the technological depth and years of expertise SAP can provide during any such project. First, there are the more than 40 years of hands-on experience we have managing mission-critical business processes for enterprises large, medium, and small. Our trusted software is ubiquitous among companies across the globe. As Dr. Vishal Sikka, head of technology and innovation and member of the executive board and the global managing board of SAP AG, notes in his blog,[3] more than 500 million users worldwide deploy SAP software and approximately 65% of the planet's gross domestic product is touched by SAP applications. Arguably, SAP is the business software engine for the global economy.

More than 12,000 SAP engineers and consultants located around the world devote their careers to enterprise application migrations and implementations. No one knows SAP software better. With that understanding comes a deep knowledge of business processes and how to translate those processes smoothly, efficiently, and comprehensively into SAP standard software.

We have an established portfolio of proven best practices for all industries that help organizations select, deploy, manage, and migrate to the most appropriate data management platforms for their business. The overarching criterion for these best practices is to simplify data management operations while improving application performance and delivering positive business impact.

No other database is more responsive for SAP Business Suite users than SAP Sybase ASE, because every area of performance improvement is leveraged from both the application and database side by SAP developers.

strategy is simple: deliver application performance, reliability, and value to our customers. There is no greater way to do so than by leveraging unified SAP technology – with every component designed to work in perfect harmony.

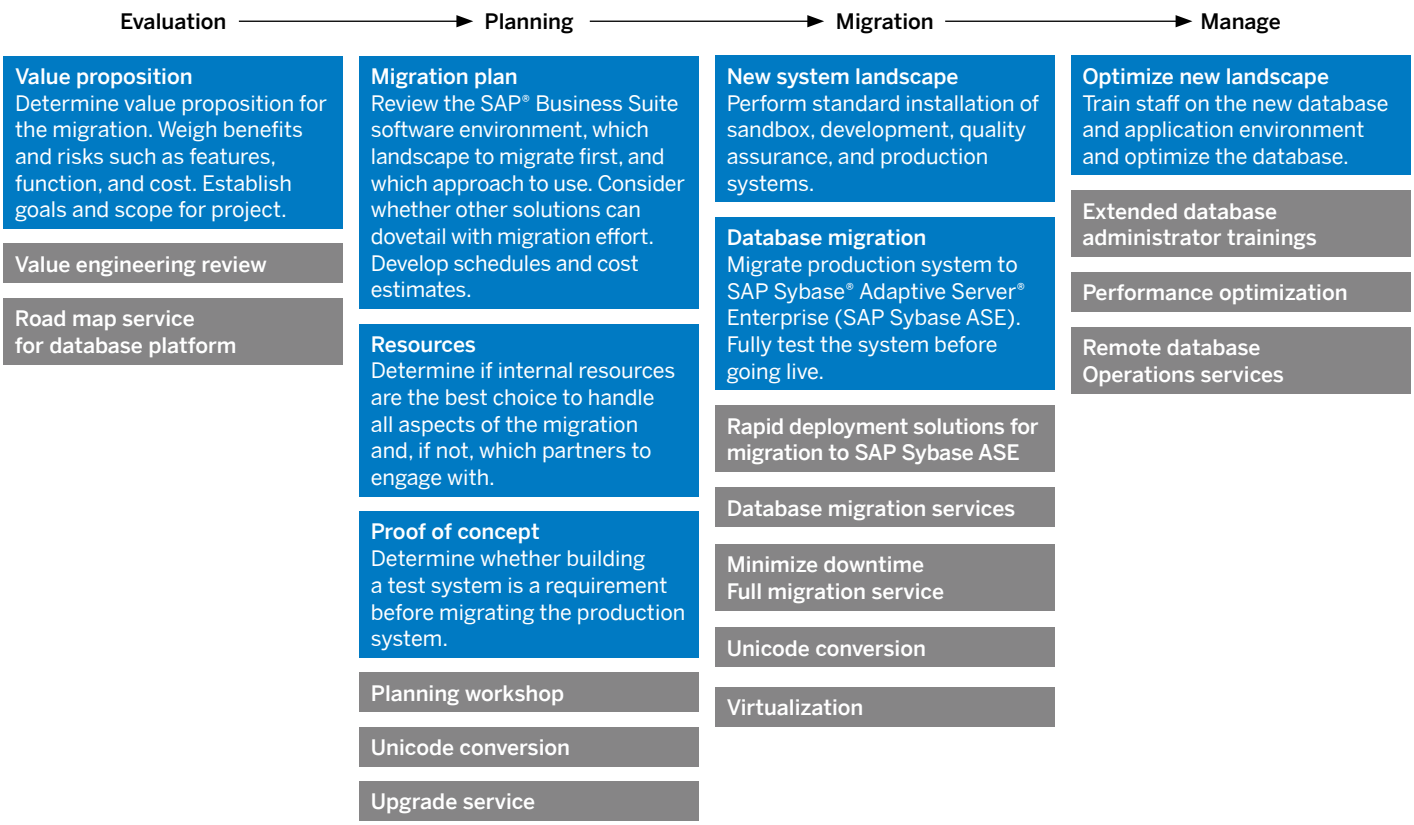
Defining Your Goals and Scope
The first stop on the road map calls for a detailed assessment of your SAP Business Suite application environment. SAP works with you to help determine the feasibility of the migration based on bottom-line considerations for total cost of ownership. Together, we evaluate your SAP Business Suite application environment to ensure that time and expense issues are identified and measured. Also, during this premigration analysis, you should review vendor contracts to determine when database licenses are up for renewal to avoid duplicate payments.

Our consultants can work with you to document your current database environment and create a high-level migration project plan for a comprehensive system landscape. We help you identify true operations and support costs for the current environment for comparison with projected savings using SAP Sybase ASE. For example, based on previously mentioned research, we can demonstrate that the sites running SAP Sybase ASE typically need fewer DBAs to support the environment than competing databases may require.

Planning Your Approach to Migration
The next stage is a comprehensive migration planning effort where you identify which landscape to migrate first and determine which migration approach to follow. During this phase, resources are identified, project schedules are established, and cost estimates are approved.

During the planning phase, you can establish additional requirements for the migration – for example, whether you

Figure 5: Customer-Driven Road Map: Safe Migration to SAP Sybase ASE



Source: SAP 2012

require new hardware or if high-availability systems need to be put in place. You can ascertain your DBA resource requirements and estimate data compression levels as well. If working with SAP services, all potential savings from the project are revealed and a customized database migration strategy is delivered to you.

In some enterprises the IT team will take complete control of the migration, empowering individual team members that possess the necessary skills and experience to do the work. However, not all companies have the depth and breadth of technical skills and the experience of managing database, operating system, **and** application migrations. For that very reason, SAP offers rapid deployment solutions for organizations looking to leverage outside expertise for a proven, time-definite approach. See the sidebar "SAP Rapid Deployment Solutions."

Other motivations for migration are frequently uncovered in planning conversations between SAP and our customers. For example, you may be launching disaster recovery sites or application consolidation initiatives and, as a result, new databases need to be evaluated. Whatever complementary projects are underway, we can help identify them and, if and where possible, integrate them with your database migration effort.

Migrating and Testing Your Database

When your planning is complete and your organization has approved the migration project, the next milestone is to begin the database migration itself. With SAP Sybase ASE, you can choose from a wide range of SAP-certified, enterprise-class servers and operating systems.

During this phase of the migration, if a new operating system is specified, or a change in hardware mandated, the new operating system and servers will be installed and tested first.

SAP® RAPID DEPLOYMENT SOLUTIONS

Perhaps one of the biggest barriers to any migration project is time. Often a migration is forecast to take so long to complete that it's never undertaken, despite the obvious benefits. Slow and expensive migrations occur for two main reasons: poor upfront planning and a lack of relevant experience on the part of the database migration team.

To eliminate delays and the concomitant costs that go with them, SAP® Rapid Deployment solutions can deliver fast, efficient, and affordable migrations tailored for specific industries and companies of all sizes.

Some of the advantages of our rapid-deployment solutions are outlined below. They offer:

- **Predictability** – They present detailed costs, timelines, and specific goals in clear language with actual cost data for associated fixed-scope services.
- **Integration** – They help you assess and plan for current business functions, as well as anticipated future IT landscapes, such as mobile, cloud computing, and in-memory computing.
- **Choice** – They help you align deployment options with your needs for on-premise, hosted, or cloud computing environments.

SAP Rapid Deployment solutions apply well-established templates, field-proven best practices, preconfigured content, and customer-specific educational materials in an innovative delivery model that helps quicken time to value. Solutions are designed for a range of key process areas, including:

- Sales, service, and marketing
- Supply chain management and manufacturing
- Product development and manufacturing
- Human resources
- Financials
- Operations and IT
- Mobile, in-memory, and cloud computing

Implementing enterprise software can present challenges due to scope creep, loose project management, and unpredictability of costs and timelines as well as internal demands for customization. The fixed scope, fixed cost, experience, best practices, and skills offered by our rapid-deployment solutions help keep your projects on track. Proprietary migration tools, preconfigured content, and SAP templates can quickly deliver anticipated functionality, with minimal need for customization. Our tailored training guides help ensure that postimplementation solution productivity is sustained.

Our track record is impressive. For example, we have managed migration deployments for more than 1,400 rapid-deployment solutions for over 1,000 customers. Most of those deployments have gone live in less than 12 weeks, and some in as little as 8 weeks.

Before making the decision to embark upon a migration, your IT organization may want to validate the actual range of performance improvements expected from the migration, as well as uncover any potential integration issues by conducting a proof of concept. The proof of concept tests for performance, integration issues, and usability. It employs the same operating system that will be in place in the planned production environment. SAP Sybase® Adaptive Server® Enterprise works with more operating systems than any of the leading competing databases, assuring the widest range of customer IT preferences is supported.

Our SAP engineers and consultants stand ready to execute proof-of-concept tests for SAP Business Suite software to ensure the integrity of the process. Utilizing proprietary methodologies that generate precise and timely results, our knowledge of SAP software assures the most thorough and accurate testing possible. We can replicate the customer environment in such a way that conclusively shows application performance improvements using the new database.

The next step is to prepare your source systems (the current application and database environment) and the target systems (the new environment). For example, the source systems database schema needs to be mapped into a working SAP Sybase ASE schema, which refers to the physical model of the database – specifically the tables, columns, indexes, views, data types, and more. If SAP manages the migration, our engineers and consultants then install proprietary tools that automate steps; other vendors would have to manually perform these steps by writing laborious Structured Query Language (SQL) data definition language scripts. Thus, in addition to the skills of the SAP technical staff, our proprietary automated tools – built from years of database migration experience – greatly speed up the migration process while keeping costs down.

Then the SAP Sybase ASE database with the proper schema is generated on the target system. When the source system data is moved to the new target system, the new system is rigorously tested to ensure that it meets your requirements. It's tested thoroughly before the source data is loaded into the database. SAP Sybase ASE offers you a number of methods to quickly and safely move data from the source database to the target system. SAP experts can choose the best, most cost-effective method to manage the process, based on the source database and its configuration.

Once the source data is packaged and ready, it is transported to the target system. This includes not just the application data in the database but associated user information such as login and password information as well as user access rights. Differences between the source and target databases are also resolved, such as case-sensitive or non-case-sensitive conditions.

Here, again, our competence and experience can be critical. That's because in any migration to the source system, your system will need to be offline during the exporting of the data. To minimize downtime, it makes sense to use the most experienced migration experts available – those armed with the most advanced migration tools, such as those available to SAP's team.

On the subject of downtime, for some companies any downtime is an unacceptable condition. For enterprises that demand 24x7 operations, SAP offers near-zero downtime services to help ensure every available second of uptime from the newly migrated database and SAP Business Suite application.

No database is too large (or too small) to migrate. The size of your database will partially determine how long it takes to complete the data migration step. However, that time window has already been accounted for in your migration plan.

The final phase of a standard database migration engagement is to fully test the system. Once this is completed, SAP provides you with comprehensive documentation of the migration process. At this stage, the standard migration project is complete, and you can give your final approval to the work.

Managing the Database

Along with comprehensive documentation, SAP offers support during the transition to management of the new database. One of our core services is DBA training, and the standard SAP engagement includes a two-day training seminar. During the training, your DBAs learn about the architecture, structure, functionality, and integration of the SAP Sybase ASE database. Knowledge transfer covers everything from how to administer the system to how to parameterize the database.

Of course, you can sign up for incremental DBA training. We offer an in-depth curriculum of database education, such as performance tuning and troubleshooting, which can ultimately lead to professional certification on the SAP Sybase ASE database.

Options and Additional Services

Once your target database is tested and ready with production data, SAP Business Suite is loaded onto the new system. If your SAP migration plan called for an application software upgrade option as well, the new version will be installed.

Another option strongly suggested by SAP is Unicode conversion. Unicode is the lingua franca of interapplication communication, enabling the translation of more than 100,000 characters found in the world's many languages (compared to 94 printable ASCII characters). Unicode is an industry standard, not an SAP standard. Data passed in interfaces between applications needs to be interpreted correctly. The Unicode standard representation of characters makes communication between different applications easier and more consistent. For companies working with a global supply or value chain, adopting this standard is highly recommended.

SAP also can complete other work for your database and application environment. For example, we support:

- Performance and tuning of the database
- Installation of high-availability systems
- Implementation of disaster recovery sites
- Migration of non-SAP software to the new environment

In a matter of weeks, your migration to SAP Sybase ASE can be complete. Following the customer-driven road map and leveraging our unmatched experience and resources is a proven way to accelerate time to value and help ensure your project comes in on time and within budget – making your whole database migration experience as smooth as possible. The benefits speak for themselves: SAP Business Suite users enjoy improved performance, IT runs a truly mission-critical database infrastructure, and your business has a database with a lower cost of ownership.

CONCLUSION

Today businesses expect and need applications to offer real-time information. The combination of SAP applications and a real-time data platform can get you there. Migrating to SAP Sybase ASE, with its excellent performance, outstanding value, and rock-solid reliability, is a smart move on its own. When you consider the tight integration with SAP Business Suite and all the benefits that integration can deliver now and in the future, migrating to SAP Sybase ASE is a strategic initiative that any organization running SAP applications should give serious consideration.

FIND OUT MORE

To learn more about how SAP can help your organization support tens of thousands of concurrent users with real-time performance on cost-effective, standards-based platforms, call your SAP representative today or visit us on the Web at www.sap.com.

FOOTNOTES

1. "Calculating the True Cost of RDBMS Ownership and How Sybase ASE Stacks Up: A Guide for SAP Business Suite Users," IDC white paper, sponsored by Sybase (December 2011), www.sap.com/asset/index.epx?id=47b15bef-d528-4843-965e-b243c458d7f4.

2. "Sybase ASE Total Cost of Ownership: A Comparison to Oracle," Bloor Research (September 2011), www.sybase.com/files/White_Papers/SYBASE_ASE_Bloor_Research_TCO_vs_Oracle.pdf.

3. Dr. Vishal Sikka, "Freedom for Java," SAP Community Network (November 9, 2009), http://scn.sap.com/people/vishal.sikka/blog/2009/11/09/freedom-for-java.

With SAP Sybase ASE as the foundation for your SAP Business Suite applications, you can improve overall data management and achieve efficiencies in application cost, responsiveness, and reliability while setting the stage for future growth.

www.sap.com/contactsap

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