

*Improving performance across critical enterprise applications
and databases*



**Amplify application performance with powerful
infrastructure solutions from IBM**

“As a global enterprise operating in the highly competitive consumer product market, Colgate encounters many challenges to keep its IT responsive to changing business needs. Working with IBM, major IT optimization efforts at Colgate have already improved IT asset utilization, efficiency, and productivity. We believe that the IBM approach to IT optimization is the right way for Colgate to gain better control of costs, and bring IT services into exceptionally close alignment with our business.” —Jim Capraro, Director of Global Information Technology, Colgate-Palmolive¹

Today's businesses face significant challenges from two opposing forces that have a direct and unavoidable effect on viability and performance. The first is the unprecedented growth in the information and applications required to run today's business infrastructures. This rapid technological expansion has put growing strain on IT departments looking to be on the cutting edge and delivering optimal service levels to their businesses. However, their ability to achieve these goals is severely restricted by the second issue, in today's economic crisis, which is shrinking the funding available for IT optimization projects.

Why IBM Systems for your mission-critical application and database workloads?

Whether they rely on SAP, Oracle, Microsoft® SQL Server®, or IBM DB2®, many companies are finding that their current IT infrastructures can no longer accommodate these critical applications, even while economic conditions decrease the budgets available to support them. Businesses need smarter systems to provide optimal support for growing application and database workloads, while reducing their overall cost structure.

IBM can help you develop a dynamic infrastructure for your application and database workloads so your business can become “smarter”—by being more service oriented, finding new efficiencies, reducing overall TCO, and being more responsive to changes throughout the organization and across the globe.

One of the primary advantages of working with IBM is our integrated approach, combining the deployment of servers and storage, the world-class skills of the IBM Migration Factory for application and data migration, and IBM Global Financing offerings, in one complete solution. Migration financing allows project costs to be structured into monthly payment plans that help clients manage cash flow during project implementation, balance operational and capital expenditures and minimize risk.

Managing growth economically

IBM understands that companies need to grow economically. That's why IBM systems give you room for growth, but don't force your company to pay up front for capacity that your company may not need today. For instance, IBM System x3950 M2 servers let you “pay as you grow” by scaling from four cores to 64, allowing you to add capacity as you need it.

IBM can also help you minimize the number of servers your company needs by offering higher per-core performance and integrated virtualization capabilities, which means that fewer servers are needed for the same application or database workload. Fewer servers equates to lower software license fees, lower energy costs, and less floor space.

Streamlining the architecture to do more with less

Competitive organizations are always looking for ways to do more with less, and IBM can help. IBM N series storage systems, for example, feature thin provisioning, which enables applications to dynamically add storage capacity as needed without requiring assistance from IT staff members.

IBM can also help you streamline systems maintenance by enabling your systems to support more users and more substantial workloads per server. For example, IBM Power Systems™ offer Capacity on Demand, which can help ensure your systems have the resources to run applications at peak performance.

Reducing risk

With a track record of leadership in servers and storage, IBM helps today's companies reduce risk by providing server and storage systems they can count on for their most critical business applications and databases. IBM's proven hardware systems deliver the reliability, scalability, and resilience companies need in order to compete in today's market.

IBM also continues to lead the way in high availability technologies. IBM PowerHA™ solutions, for example, can help companies keep pace with the demand for 24x7 availability by protecting critical business applications and databases from outages. These tools can monitor your entire system and can automatically restart applications on backup equipment when failures occur or when performance degrades.

IBM Systems in action

Because IBM can help optimize heterogeneous infrastructures so efficiently, businesses of all descriptions have turned to IBM to help them compete in the global marketplace. Regardless of your size, location, industry, or IT environment, IBM has systems solutions that can meet your needs. The following case studies show how IBM has boosted application performance for a wide range of companies.

Scotmid

Location: Edinburgh, Scotland

Industry: Retail

Technologies: SQL, IBM System x3850 M2, System p5® 510 - OpenPower® Edition, IBM System Storage™ N5300, Linux®

The challenge: To ensure capacity for future growth through consolidation and virtualization

One of Scotland's leading retailers, [Scotmid](#) was looking for a way to efficiently handle large quantities of sales data and use it to maximize sales returns. The majority of Scotmid's legacy servers were underutilized and underperforming. Their backup window had also increased to the point that it impacted the company's daily workload. The company wanted to move in a new and more flexible direction, implementing virtualization as part of a major infrastructure upgrade.

Although Scotmid evaluated solutions from other vendors such as HP and EMC, they chose to work with IBM.

"We have a certain trust in the IBM brand," says Scott Kerr, Head of IT at Scotmid. "I had worked with IBM in the past, and there was just a level of input and support from IBM that we weren't getting from other vendors."

With the help of IBM Premier Business Partner b2net Ltd., Scotmid consolidated 23 HP servers onto an IBM platform that includes five IBM System x3850 M2 servers, a clustered network attached storage solution featuring IBM System Storage N5300, and IBM System p® 510 server, an IBM System Storage TS3310 Tape Library, and virtualization through VMware. All of the company's business-critical functions are now up and running on the virtualized environment, including six SQL databases ranging in size from 40 to 500 GB.

"We've definitely noticed an improvement in the servers," says Peter Haley, Technology Manager for Scotmid. "Even coming off a server with a 3.4 GHz processor going down to a single-core 2.4 GHz, we haven't lost any speed on that box.² The IBM infrastructure is proving to be very efficient in the virtualized environment. And the fact that we can move the servers from one to another is a major benefit to us."

The comprehensive solution from IBM provided Scotmid with improved systems performance and expanded capacity for data, new levels of IT flexibility to meet changing business needs, and enhanced business intelligence capabilities to maximize sales.

Colgate-Palmolive

Location: New York, NY

Industry: Consumer packaged goods

Technologies: SAP® R3® Enterprise, Oracle®, IBM BladeCenter® JS20, IBM System p5 model 595, IBM System Storage Enterprise Storage Server®, IBM virtualization software

The challenge: To improve IT service levels while reducing workload costs by up to 70 percent

A leading global consumer products company, [Colgate-Palmolive](#) needed to be able to react quickly and locally to market threats as well as opportunities. The company was running SAP R/3 Enterprise software on IBM System p hardware after switching from Sun in the 1990s.

As Jim Capraro, Director of Global Information Technology, explains, "Our mission is to innovate more and to keep the costs flat. For example, we see our processing workload growing by around 30 percent a year, and storage volumes growing by up to 50 percent a year. The challenge is how to manage this growth effectively, meet our service commitments and continue to reduce our costs."

Colgate adopted the IBM IT optimization approach to create an IT infrastructure that is more responsive and is easier and less expensive to manage, upgrade and run. Colgate has implemented a whole range of IBM technologies, with IBM System p5 and eServer™ p5 systems, IBM BladeCenter servers, IBM TotalStorage® Enterprise Storage Server and IBM virtualization software. The SAP application databases run on the System p5 platform, while the SAP applications run on the BladeCenter servers, all under IBM AIX 5L™.

For Colgate, the benefits of implementing this solution include a reduction of about 10 percent year-on-year in IT operational costs, despite an increase in application workload. IBM servers can reallocate capacity as needed, which improves the company's ability to respond to market forces as well as internal needs. Since the start of the project, Colgate estimates that while the workload has increased by about 10 percent and storage needs have risen by approximately 30 percent, the corresponding costs have been reduced by up to 70 percent and 60 percent respectively.¹

"We believe that the IBM approach to IT optimization is the right way for Colgate to gain better control of costs and bring IT services into exceptionally close alignment with our business," says Capraro.

JAB ANSTOETZ

Location: Bielefeld, Germany

Industry: Wholesale distribution

Technologies: SAP® R/3® SAP Global Trade Services, IBM DB2®, IBM Power Systems model p5-55), IBM System Storage DS4800, IBM TotalStorage® 3494 Tape Library, IBM AIX®, IBM PowerVM™

The challenge: To boost SAP ERP performance by 17 percent while reducing costs

JAB ANSTOETZ is a global fabric manufacturer and seller, with an integrated sales and logistics ERP solution from SAP. The organization has continued to upgrade and optimize their ERP systems, which support vital business processes, including accounting, human capital management, and sales and distribution.

JAB ANSTOETZ was running SAP applications on 15 UNIX®-based servers, and it was becoming difficult to manage, monitor and maintain the infrastructure. “The environment kept growing, and we knew that simply buying more servers was an unsustainable strategy in the long term,” says Hermann Grauthoff, head of the IT department at JAB ANSTOETZ.

With the help of IBM Premier Business Partner Becom, JAB ANSTOETZ replaced 15 servers with four new IBM Power Systems servers running IBM AIX. They also installed three IBM System p5 550 servers, each with eight IBM POWER5+™ processors. IBM Global Technology Services provided comprehensive support services and developed a SAN using the IBM System Storage 4800 and Tivoli® software for managing and monitoring.

“Our partnership with IBM Global Technology Services has been a key element in the success of our SAP ERP strategy. From server, storage and middleware design concepts through to implementation and support, they have delivered a consistently excellent service,” says Andreas Heidemann, System Administrator at JAB ANSTOETZ.

They virtualized their servers using IBM PowerVM technology, allowing them to centrally manage the SAP environments for all of the companies in the JAB ANSTOETZ group as well as those of select external clients.

Explains Heidemann, “With PowerVM technology on the IBM Power Systems platform, we have the ability to set up and manage SAP application environments quickly and easily.”

Benefits to JAB ANSTOETZ include a reliable, high-performance infrastructure that enables same-day order processing and dispatch for most customers. Consolidated servers simplify maintenance and provide for green savings by reducing IT workload. In addition, DB2 deep compression boosted SAP application performance by 17 percent while reducing storage requirements by 32 percent.³

Energen Corporation

Location: Birmingham, AL

Industry: Energy and utilities

Technologies: SAP® ERP, Oracle Database 10g, IBM System p5 570, IBM AIX 5L

The challenge: To improve SAP performance by up to 92 percent and save \$500,000

Among the top 20 independent exploration and production companies in the U.S., Energen has averaged more than 30 percent annual growth in earnings and total shareholder return over the last five years. In the face of deteriorating system performance on their legacy platform, the company sought to refresh their mid-range server environment. They worked with IBM Business Partner Mainline Information Systems to replace 20 Sun servers with two IBM System p5 570 servers, each with eight POWER5+ processors running AIX. In order to enable multiple systems to share processing and I/O resources, they also virtualized their SAP environment into logical partitions.

“It made sense to take a fresh look at the entire environment, to see where we could cut costs and improve service levels,” says Ron Payne, Director of Infrastructure Services at Energen.

The migration significantly eased the pressure on Energen’s data center, where the continual addition of new physical servers was using up valuable floor space and putting a growing strain on the company’s electricity supply. Benefits also included increases in performance of up to 92 percent. For instance, a typical batch processing run went from 24 hours down to two hours—an improvement of more than 90 percent. But the most impressive benefit was a financial one. By switching to a server-based license with Oracle, Energen was able to reduce its software licensing costs by 40 percent, saving the company an estimated \$500,000 annually.

“The reduction in Oracle licensing costs was the main contributor to the total \$500,000 annual savings we achieved by migrating to IBM System p for our SAP software environment,” explains Payne. “Migrating from Solaris also produced software cost savings, because with IBM AIX we no longer needed a separate volume management solution from Veritas, saving around \$100,000 annually.”⁴

Aviza Technology

Location: Scotts Valley, CA

Industry: Electronics

Technologies: Oracle E-Business Suite, Oracle Database 10g, IBM System x3850 M2 and x3950 M2, IBM Systems Storage N5200, Red Hat Enterprise Linux 4

The challenge: To resolve systems reliability and reduce processing time by more than 14 hours

Aviza Technology designs, manufactures, sells, and supports advanced semiconductor equipment and technologies for the global semiconductor industry. The company had been running Oracle E-Business Suite on Sun Solaris-based systems, but they began to encounter end-of-life issues that impaired their ability to meet service and availability goals. The company needed to find a cost-effective means of addressing these performance and flexibility issues so that they could continue to provide around the clock services and support to their customers worldwide.

Aviza implemented a two-tier Oracle configuration, with Oracle EBS v11.5.10 on one IBM System x3850 4-socket server and Oracle Database 10g on one IBM System x3950 16-socket server—both running Red Hat Enterprise Linux 4. An IBM System Storage N5200 provides 2.4 TB of data storage. The development environment has six test instances running on five x3850 servers, with a second N5200 providing 7.2 TB of data storage. IBM Premier Business Partner Sycomp provided installation and support.

“We evaluated a number of other vendors, but we were concerned about uptime, maintenance and the need for specialized skills,” says Dale Spencer, Vice President of Information Technology and Corporate Services at Aviza Technology. “We were comfortable working with IBM. They were very informed, and they did a good job of laying out the options for us.”

Aviza saw immediate benefits from the solution—reliability and performance improvements were felt across the company. Aviza’s finance group in particular appreciates the new systems. The department’s monthly cost roll-ups used to take anywhere from eight to 18 hours to run, and now they take less than four.⁵

“IBM System x® has exceeded our expectations around reliability and performance,” Spencer reports. “We’re getting positive comments from everyone. And with the IBM solution, we’re a lot more flexible than we were before.”

FranklinCovey

Location: West Valley City, UT

Industry: Professional services

Technologies: Oracle databases, IBM System p5 570 server, IBM System x servers, IBM System Storage SAN Volume Controller, IBM AIX 5L

The challenge: To save \$12,000 per month while boosting performance of business processes

FranklinCovey provides effectiveness training, productivity tools and assessment services for Fortune 500 companies, government agencies, and educational institutions. With a variety of Web-based tools that run their Web sites and enable e-commerce, the company relies heavily on IT for both customer service and back-office operations. With their IT platform reaching end-of-life, they began looking for an infrastructure that could deliver the high quality of service they had previously enjoyed.

After considering products from several vendors, FranklinCovey decided to work with IBM Premier Business Partner Sirius Computer Solutions to explore an IBM solution that would fit their environment. They deployed an IBM System p5 server, IBM System Storage SAN Volume Controller, and two IBM 32-port switches.

Installing the IBM p5 server afforded FranklinCovey substantial benefits, including highly reliable performance, scalability and exceptional flexibility through logical partitioning (LPAR) capabilities. “We used to have three servers to run production,” says Dan See, Director of Information at FranklinCovey. “But with the increased performance of the p5 570, we can now run production on a single partition.” In addition, the SAN Volume Controller has helped FranklinCovey retain its existing storage investment while simplifying management of its heterogeneous storage systems.

The company estimated that after going live with the IBM implementation, they would save approximately US\$6,000 per month in administrative costs, and as much as \$12,000 per month in hardware maintenance costs.⁶ FranklinCovey can use those savings to help the organization grow without having to alter its bottom line. “We plan to take those savings and put them straight into the bank,” says See. “Our company is dedicated to effectiveness, and IBM is helping us maximize our effectiveness and efficiency within our own organization.”

A roadmap to improved performance

Regardless of your current IT infrastructure, IBM’s integrated approach offers you a clear roadmap to improve the performance of both your hardware and software. By switching to IBM, you can regain control of your infrastructure, and help reduce energy and facilities costs.

Isn’t it time your business became smarter and more dynamic?
Isn’t it time you switched to IBM Systems?



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