IBM

Reduce the cost of data to increase the value of information

IBM DB2 helps businesses capitalize on investments in business information

In an increasingly interconnected world that's drowning in data, companies know that information is the key to business success. That realization has driven them to make significant investments in managing and analyzing that information. Now, they must maximize the value delivered by those investments by getting the most from their information and infrastructure.

IBM® DB2® is the database management system of choice for relieving cost pressures, helping to deliver greater business value with low operational costs, high reliability and increased ease of use. But the advantages do not stop there. With native support for both relational and XML data, DB2 is optimized for Service Oriented Architecture (SOA) and positions organizations to create new opportunities.

Businesses also benefit from the extensive and growing DB2 ecosystem. IBM works closely with IBM Business Partners, including SAP, to bring a rich set of capabilities to DB2 users. DB2 is ideally suited for use with the IBM WebSphere®, IBM InfoSphere™, IBM FileNet® and IBM Cognos® product families—in fact, it powers more than 100 IBM products, including IBM InfoSphere Warehouse.

With this wide range of solutions, DB2 becomes the cornerstone of a "smart information agenda," a comprehensive vision for unlocking the business value of information for competitive advantage, and for optimizing business performance. In this vision, information technology is business-centric, is characterized by flexible systems and rapid implementation and is built on a sustainable, scalable foundation.

Streamline management to help reduce operational costs

DB2 helps lower the cost of managing data by automating administration, increasing storage efficiency, improving performance and simplifying the deployment of virtual appliances.

For example, by automating tasks such as memory allocation, storage management and business policy maintenance, DB2 is able to perform many management tasks itself, freeing up DBAs to focus on new projects.

"By upgrading to DB2 9, we recovered 2.3 terabytes of storage and deferred more than US$1 million in storage expenditures during the fiscal year."

—Leroy Hill
Fiserv

With its unique Deep Compression technology, DB2 can also help reduce storage needs for data, indexes, temporary tables and large objects by up to 80 percent.[1] The end result is that businesses can operate with less storage hardware, reducing consumption of power, cooling and floor space resources.

Online transaction processing and data warehousing performance tests demonstrate that DB2 can often run the same workload with as little as half the hardware as competing solutions, slashing acquisition, maintenance, administration and power costs.[2] For extremely high performance at very low latencies, DB2 users can also deploy IBM solidDB® Universal Cache and IBM InfoSphere Streams.

With licensing terms that are virtual-machine friendly, DB2 is optimized to work with leading virtualization solutions, including VMware. Databases can be deployed as virtual appliances, simplifying server deployment and accelerating time to solution.
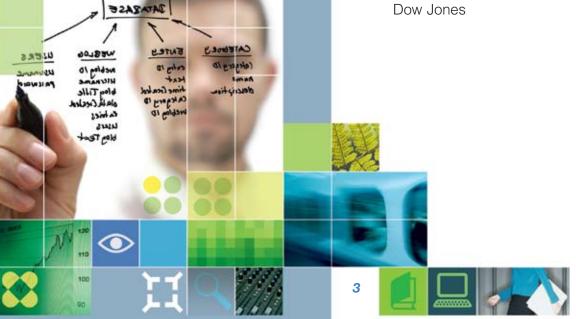
Better manage risk with security and high availability

DB2 helps meet and exceed service-level agreements (SLAs) by being one of the best where it matters most: security, availability and workload management.

Extensive security and audit capabilities help protect information from ever-changing threats, and address regulatory requirements such as the Sarbanes-Oxley Act. DB2 supports a robust role-based security model, enabling businesses to divide authority in compliance with data governance standards. Trusted context provides more control in three-tier environments, such as IBM WebSphere. Advanced encryption throughout the data lifecycle further minimizes the potential for unintended access to sensitive data.

"We ended up choosing DB2 for several reasons. One was reliability, second was performance and perhaps the most important factor was ease of use."

—Bashir Khan
Dow Jones

DB2 helps businesses increase availability by reducing planned and unplanned outages. For example, many database administration activities can be done while data remains online, including changing database schemas, moving data and reorganizing partitions. Also, high availability and disaster recovery configurations can typically be set up in minutes, allowing recovery in seconds as clients are seamlessly redirected to a secondary database.

With DB2 Workload Manager (WLM), database administrators can increase or decrease the priority of workloads to help ensure that runaway queries don't overwhelm the system and that key workloads under tight SLAs get priority. The workload management capabilities are incorporated directly into the DB2 engine infrastructure to handle higher volumes with minimal overhead, and are enabled for tighter integration with external workload management products such as those provided by IBM AIX® and Linux®.

Reduce application development costs

To ease application development and deployment, DB2 supports the latest languages and development environments, including Microsoft® Visual Studio® 2008, Eclipse and IBM Optim™ pureQuery Runtime for Linux, UNIX® and Windows®.

IBM Optim solutions help you design, develop, deploy, operate, optimize and govern enterprise data throughout its lifecycle. They facilitate collaboration across analysts, architects, developers and administrators via shared artifacts automation and consistent interfaces. Comprehensive tools help improve problem isolation, performance optimization, capacity planning and workload and impact analysis. IBM Optim Integrated Data Management solutions enable organizations to more effectively respond to business opportunities, meet SLAs, comply with data privacy and data retention regulations and grow the business while driving down total cost of ownership.

"It's hard to believe, but we only have three DBAs supporting over 100 instances of DB2."

—Phil Kilgore
Lithonia Lighting

With native support for both relational and XML data, DB2 can help simplify development and deployment of advanced new applications while reducing storage costs and increasing performance. DB2 pureXML® eliminates much of the work typically involved in the management of XML data, and serves XML data at unmatched speeds. Applications can mix relational and XML data as business needs dictate. DB2 9.7 also adds end-to-end native XML support for both transactional and data warehouse applications, opening new opportunities to extract business value from XML data. With DB2, you can transform your use of XML from a convenient way of representing data to a true business asset.

Enhancements in DB2 9.7 help streamline migrations

DB2 9.7 introduces a number of enhancements that help simplify the movement of applications to DB2 and leverage existing skills. With DB2 9.7, differences are now the exception, not the rule, when it comes to many database and development features—including concurrency models, SQL dialects, data types, procedural languages, packages and scripting languages. And applications moved to DB2 can run with full native execution, delivering high performance. IBM can rapidly assess your application to confirm the level of compatibility—to learn more, contact your IBM representative.

Lower the cost of business analytics with dynamic warehousing

IBM InfoSphere Warehouse is a complete, multipurpose environment that enables you to access, analyze and act on real-time historical and operational information—providing the insight and agility you need to consistently generate new opportunities, contain costs and satisfy customers.

Powered by DB2, InfoSphere Warehouse 9.7 helps lower the cost of business analytics, thanks to simplified data mining design, powerful forecasting capabilities, improved performance and flexible security controls for multidimensional analysis. You can now combine unique DB2 pureXML technology with InfoSphere Warehouse database partition scalability capabilities to manage and analyze large volumes of XML data that were previously locked away in transactional systems.

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For more information

To learn more about how IBM DB2 is lowering the cost of managing data, contact your IBM representative or visit **ibm.com**/db2