Microsoft® SQL Server® 2008 provides a trusted, productive, and intelligent data platform that enables you to:

- Run your most demanding mission-critical applications.
- Reduce time and cost of development and management of applications.
- Deliver actionable insight to your entire organization.

Your Data, Any Place, Any Time.
Your Data, Any Place, Any Time.

Microsoft Data Platform Vision

A variety of factors are converging to create an information storage explosion. Enabled by new types of information, such as digitization of images and video, and sensor information from RFID tags, the amount of digital information within an organization is mushrooming. Growing regulatory compliance and globalization require that information be stored securely and available at all times. At the same time, the cost of disk storage has dramatically decreased, enabling organizations to store more data per dollar invested. Users must quickly sift through mountains of data to find relevant information. Furthermore, they want to use this information on any device and with the programs that they use every day, such as Microsoft Office System applications. Managing this data explosion and the increase in user expectations creates numerous challenges for the enterprise.

The Microsoft® Data Platform meets these needs by providing a solution that organizations can use to store and manage many types of data, including XML, e-mail, time/calendar, file, document, geospatial, and more, while providing a rich set of services to interact with the data: search, query, data analysis, reporting, data integration, and robust synchronization. Users can access information from creation to archiving on any device, from a server to a desktop or mobile device.

SQL Server 2008 Delivers on the Vision

Trusted
Run your most mission-critical applications on a secure, reliable, and scalable platform.

Productive
Reduce the cost of managing your data infrastructure, while streamlining development of applications.

Intelligent
Drive business intelligence throughout your organization, manage reports and analyses of any size or complexity, and deliver insights to every user.
SQL Server 2008 delivers on Microsoft's Data Platform vision by helping your organization manage any data, any place, any time. It enables you to store data from structured, semi-structured, and unstructured documents such as images, music, documents directly within the database. SQL Server 2008 delivers a rich set of integrated services that enable you to do more with your data such as query, search, synchronize, report and analyze. Your data can be stored and accessed in your largest servers within the Data Center all the way down to desktops and mobile devices, enabling you to have control over your data no matter where it is stored. SQL Server 2008 enables you to consume your data within custom applications developed using Microsoft® .NET and Visual Studio® and within your service-oriented architecture (SOA) and business process through Microsoft® BizTalk® Server while information workers can access data directly in the tools they use everyday such as the 2007 Microsoft® Office system. SQL Server 2008 delivers a trusted, productive and intelligent data platform for all your data needs.

One of our big reasons for moving to SQL Server 2008 so early was its scaling factor. We can handle enterprise customers, and we don’t see a limit to our ability to scale.

Peter Hammond
President, CyberSavvy
Trusted

Run your most mission-critical applications on a secure, reliable, and scalable platform.

Protect Your Data
Dynamically encrypt your valuable data within an entire database, data files, or log files, without the need for application changes. Simplify increasing regulatory compliance by using the advanced data auditing abilities of SQL Server 2008. Minimize exposure for security attacks by using Surface Area Configuration to enable only the services you require.

Ensure Business Continuity
 Seamlessly increase the reliability of applications with Database Mirroring. Simplify the recovery of applications from storage failures. Transfer operational data between the active operational systems and backup systems. Add system resources, like CPU and memory, without affecting applications.

Provide Predictable Response
Ensure consistent performance by using Resource Governor to define resource limits and priorities for different workloads and enable consistent performance. Reduce your storage costs and improve performance of large input/output (I/O) bound workloads by using data compression.

Top New Features

Use Resource Governor to manage concurrent workloads.

Enforce policy compliance consistently across the enterprise with Policy-Based Management.

Reduce storage requirements and increase query performance with data and backup compression.

Protect sensitive data with Transparent Data Encryption and advanced auditing.

Troubleshoot, tune, and monitor SQL Server 2008 instances across the enterprise with Performance System Analysis.

Build analytic solutions with design, performance, scalability, data mining, and user interface enhancements in SQL Server Analysis Services.

Take advantage of improved performance, usability, visualization, and integration with the 2007 Microsoft Office suite in SQL Server Reporting Services.

Integrate location-enabled applications through support for spatial data.

Looking at the efficiencies and time savings we’ll be gaining, [SQL Server 2008] Policy-Based Management has an enormous potential for cost savings.

Claudia Schrammel
Project Manager and BI Architect,
Austrian Broadcasting Corporation Radio & Television (ORF)
Reduce the cost of managing your data infrastructure while streamlining development of applications.

**Spend Less Time on Operations**
Manage your enterprise data infrastructure easily with Policy-Based Management. Reduce the time spent on daily maintenance operations by defining a common set of policies for most database operations like query optimizations, naming conventions, backup and restore operations, and index management. Apply policies to groups of servers for consistent management across the enterprise. Enable Performance System Analysis by collecting performance data from your system and storing it in a centralized data repository. View reports to benchmark and analyze system performance and health.

**Accelerate Development**
Access data by defining business entities instead of tables and columns with the ADO.NET Entity Framework. Query and retrieve these entities natively within any .NET language with Language Integrated Query (LINQ). Enable developers to work with the logical entity model, and administrators to define the physical implementation of the model as tables and columns.

**Access Your Data from Anywhere**
Create flexible, occasionally connected applications that can function when disconnected from the network. Create a next generation of applications that can work on a local data store and automatically synchronize the local store with a central store when a connection is available.

**Store and Consume Any Type of Data**
Use the new FILESTREAM data type to manage unstructured data, such as documents and images outside the database. Store XML efficiently and enable easy access with XQuery. Improve the handling of temporal data by using new date and time data types.

**Deliver Location Intelligence**
Consume, use, and extend location-based data through spatial-enabled applications. Build location-aware applications by using new spatial data capabilities in SQL Server 2008.

Drive business intelligence throughout your organization, manage reports and analysis of any size or complexity, and empower users by providing powerful visualization and integration with the Microsoft Office System.

**Integrate Any Data**
Scale and manage large numbers of users and data with improved query performance on large tables. Optimize queries for data warehousing scenarios, and increase I/O performance with efficient and cost-effective data storage. Integrate growing volumes of data from disparate systems with the scalable data integration features of Integration Services. Consolidate real-time data into the data warehouse with Change Data Capture functionality.

**Deliver Relevant Information**
Empower users to answer complex questions by providing the relevant information through reports with powerful visualizations and ability to render in Microsoft Office Word and Microsoft Office Excel®. Enable users to create complex reports and share them internally and externally with customers and partners using Microsoft Office SharePoint Server.

**Drive Actionable Insight**
Provide a consistent set of key performance indicators (KPIs) and business metrics to all users by using the comprehensive and scalable analysis platform of SQL Server Analysis Services with intuitive access through Office Excel and third-party applications. Integrated Data Mining enables predictive analysis so you can investigate common issues like forecasting and identifying key influencers for decisions. Develop scalable analysis models with enhanced designers that incorporate best practices into the design experience. Increase the scale and performance of analysis by using enhanced analytical capabilities and complex computations and aggregations.

**Policy-Based Management**

**Data Mining Add-ins for the 2007 Office System**
SQL Server 2008 Technologies

SQL Server delivers a wealth of features grouped by core technologies that enable you to easily consume and understand the breadth of capabilities available for your business.

**ADO.NET Data Services** Microsoft ADO.NET Data Services provides a first-class infrastructure for the next wave of dynamic Internet applications by enabling Web applications to expose data as REST-based data services that can be consumed by client applications in corporate networks and across the Internet.

**ADO.NET Entity Framework** The Microsoft ADO.NET Entity Framework is an evolutionary step in data development. It simplifies data access code in applications by enabling developers to create a customizable conceptual model for data from any source and easily map it to business requirements.

**Analysis Services** Microsoft SQL Server 2008 helps enable organizations to build comprehensive, enterprise-scale analytic solutions that deliver actionable insights through familiar tools.

**Data Mining – Predictive Analytics** Microsoft SQL Server 2008 empowers informed decisions with predictive analytics through intuitive data mining, seamlessly integrated within the Microsoft Business Intelligence platform and extensible into business applications.

**High Availability – Always On** Microsoft SQL Server 2008 Always On Technologies provides a full range of options to minimize downtime and maintain appropriate levels of application availability.

**Integration Services** Microsoft SQL Server 2008 provides a scalable enterprise data integration platform with exceptional ETL and integration capabilities, enabling organizations to more easily manage data from a wide array of data sources.

**LINQ** LINQ is an exciting evolution in data programming that enables developers to build queries over data directly from within any .NET-based programming language. LINQ to Entities, LINQ to DataSet, LINQ to SQL, and LINQ to XML are key implementations of this powerful technology.

**Manageability** Microsoft SQL Server provides a policy-based system for managing one or more instances of SQL Server along with tools for performance monitoring, troubleshooting, and tuning that enable administrators to more efficiently manage their databases and SQL Server instances.

**Native Data Access** Enhanced SQL Server 2008 Native Client provides a high performance, versatile data access library that enables developers to take advantage of the new capabilities of SQL Server 2008.

**Performance and Scale** Microsoft SQL Server 2008 provides a comprehensive data platform that can grow with your business. SQL Server 2008 is packed with technologies to scale-up individual servers, scale-out very large databases, and optimize performance.

**Reporting Services** Microsoft SQL Server 2008 Reporting Services provides a complete server-based platform designed to support a wide variety of reporting needs including managed, enterprise, ad-hoc, embedded, and Web-based reporting and enable organizations to deliver relevant information where needed across the entire enterprise.

**Security** Microsoft SQL Server 2008 offers security feature enhancements that help provide effective management of security feature configuration, strong authentication and access control, powerful encryption and key management capabilities, and enhanced auditing.

**Spatial Data** Microsoft SQL Server 2008 delivers comprehensive spatial support that enables organizations to seamlessly consume, use, and extend location-based data through spatial-enabled applications to help end users ultimately make better decisions.

**Sync Framework** The Microsoft Sync Framework is a comprehensive synchronization platform that enables collaboration and offline scenarios for applications, services, and devices. Developers can build sync ecosystems that integrate any application, any type of data, using any protocol over any network.

“The Report Builder feature of [SQL Server 2008] Reporting Services simplifies report creation and will enable our users to create their own custom reports and ad-hoc queries, while Reporting Services optimizes how they are run against the database.”

Ayad Shammout
Lead Technical Database Administrator,
CareGroup HealthCare System
SQL Server 2008 Editions

SQL Server Editions

**Enterprise Edition**  SQL Server 2008 Enterprise Edition is a comprehensive data platform that meets the high demands of enterprise online transaction processing and data warehousing applications.

**Usage Scenarios**
- Business critical
- Large scale OLTP
- Large scale reporting
- Data warehousing
- Advanced analytics
- Server consolidation

**Standard Edition**  SQL Server 2008 Standard Edition is a complete data management and business intelligence platform providing best-in-class ease of use and manageability for running departmental applications.

**Usage Scenarios**
- Departmental
- Small-to-medium scale OLTP
- Reporting and analytics

SQL Server Specialized Editions

**Workgroup Edition**  Workgroup Edition is the data management solution for small organizations that need a database with no limits on size or number of users. Workgroup Edition can serve as a front-end Web server or for departmental or branch office operations. It includes the core database features of the SQL Server product line and is easy to upgrade to Standard or Enterprise Edition.

**Web Edition**  Web Edition is a highly scalable data platform for cost-effective Web application solutions. Web Edition enables hosting companies to provide low cost, highly scalable hosting for developers, SMBs, and consumers. It is available at a low monthly licensing fee, provides support for up to four CPUs, and has no limits on memory and database size for increased scalability. It also has greater technical capabilities such as automating security policy enforcement and supporting new integration features in the .NET Framework.

**Express Edition**  SQL Server 2008 Express Edition is a free, easy-to-use and embeddable version of SQL Server 2008 for developers. Free to download, redistribute, embed, and learn, SQL Server Express Edition includes powerful features such as SQL Server 2008 Reporting Services, a server-based platform for creating and delivering traditional and interactive reports, and a graphical management tool, SQL Server 2008 Management Studio Express, for easily managing your databases.

**Compact**  SQL Server Compact is a free, easy-to-use embedded database engine that lets developers build robust Windows Desktop and mobile applications that run on all Windows platforms including Windows XP, Vista, Pocket PC, and Smartphone.
For more information, please visit www.microsoft.com/sql/2008