

SAGE MAS 200



Sage MAS 200 – SQL Server Edition Introduction and Overview

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Introduction

At Sage Software, we take pride in offering the best possible software solutions for small to midsized businesses. Our charter for Sage MAS 90 and Sage MAS 200 ERP is to provide customers with broad and deep application functionality built on rock-solid, proven platforms. Most important of all, we want to simplify technology for our customers, so that they can enjoy all the benefits of the latest technologies. Our customers want to focus on running their businesses and not their computers.

Microsoft SQL Server represents the culmination of significant initiatives from Microsoft in terms of ease of use, scalability, and data management. SQL Server has been appropriately designed for smaller businesses that cannot afford to spend a lot of time maintaining their computer systems, as well as larger businesses that require sophisticated implementations. Thus, Sage MAS 200 and SQL Server represent the perfect marriage of products for midsized businesses.

The Sage MAS 200 ERP – SQL Server Edition implementation has been thoughtfully designed to take advantage of the SQL Server features beneficial to accounting and business management software. SQL Server combines the power of a relational database with the ease of use that businesses need. Pairing SQL Server with the functionality and flexibility of Sage MAS 200 provides a robust, cost-effective accounting software system that can help businesses maximize productivity and profitability.

Please note that this document is not intended to be a technical reference or implementation guide for Sage MAS 200 – SQL Server Edition; rather, it is a general overview of Microsoft SQL Server and Sage MAS 200. For additional information about Sage MAS 200 – SQL Server Edition, or if you have questions about which product in the Sage Software family is most effective for your customer, please refer to the Partner File Center or contact your Account Manager.

Business Applications and Appropriate Technology

Software that runs a business—whether for accounting, distribution, or industry-specific business applications—is mission critical. While new technologies are proliferating at a faster and faster rate, it is not always necessary or desirable to adopt them for your business computer platform.

How do you decide which new technologies to adopt? And, when is the right time to implement them? These are some of the most important business decisions you can make. Implementing the right technologies at the right time can reduce costs, increase productivity, and give your business a competitive edge. However, inappropriate technology can result in system downtime, frustration, and business losses.

Industry Standard

You certainly want to avoid changing technologies often, so one of the best ways to select a new technology is to pick an industry standard. Industry-standard technology helps to ensure that the product will continue to be enhanced and developed in the

Sage MAS 200 and Microsoft SQL Server represent the perfect marriage of products for midsized businesses.

Implementing new technologies is an important business decision that should improve a process or solve a problem.

Industry standards are proven technologies that have already been in use at successful businesses – lowering the risk of implementing inappropriate technology.

Microsoft SQL Server is a road-tested, industry-standard database fully equal to the task of running mission-critical business applications.

future, providing you with a simple, inexpensive upgrade path. Industry standard also means that it will be easy to acquire the skills to operate the system, whether by hiring consultants and new staff, or training current employees. Microsoft SQL Server is clearly established as an industry standard, with well over 7 million licenses sold.

Rapid Deployment

To focus your efforts on running your business and not running your computers, the appropriate technology definition means a product that installs quickly and smoothly, and requires minimal upkeep. SQL Server has been designed with ease-of-use features such as the Tuning Wizard, and also numerous automated administrative tasks, such as dynamic space management, which ensures that your database doesn't run out of room. These features offer less time spent administering the database.

Road Tested

It's always a good idea to acquire products that have been in the market for a while and have had time to mature. This ensures the technology has been tested and it's performing appropriately, and that a knowledgebase has been implemented to help you troubleshoot technical problems. Now in its seventh year of availability, SQL Server is a road-tested, industry standard database more than equal to the task of running mission-critical business applications. Combine SQL Server's capabilities with market-leading Sage MAS 200, which has maintained an impressive set of accounting business rules for over 15 years, and you have an incredibly stable, proven platform on which to run your business.

Open Architecture

Access to information is "the name of the game" for business management and accounting systems. Any technology you acquire today must allow you to easily access your data with your tool of choice, including industry-standard methods of accessing the database, such as open database connectivity (ODBC) and OLE-DB. One of the biggest benefits for companies adopting SQL Server is the availability of the data outside the accounting system. There are numerous tools available to let you analyze and report on data stored within the SQL Server database. With Data Transformation Services (DTS), you can extract data from your accounting database and use it to drive or interact with other applications. With SQL Server, online analytical processing (OLAP) services are built in, so the Sage MAS 200 database can be queried in multiple dimensions using pivot tables within Excel 2000 or Windows XP.

SQL Server Features and Benefits

SQL Server offers many benefits to customers who use business management software. Some of the benefits and features listed are not implemented directly within Sage MAS 200, for example database backup and restore, and OLAP services. These benefits are provided to the customer because the accounting data is stored within a relational database. Here are some of the benefits and features of SQL Server:

RDBMS

Microsoft SQL Server is a relational database management system (RDBMS). There are other RDBMS on the market, but SQL Server is designed and priced to provide small to midsized companies with the tools they need along with reduced maintenance costs and ease of use. A relational database provides a secure container for important data, as well as a built-in language (SQL – Structured Query Language) to provide a standard way of interacting with the database.

Reliability, scalability and access to information are the key benefits of an RDBMS. Each version of SQL Server has built upon the features that provide these benefits.

Reliability

Data integrity is critical for businesses. The computer system needs to run smoothly without interruption, and in the event of power failure or other system interruption, it must be able to recover quickly with minimal loss of data.

The commit/rollback features of SQL Server make it possible to roll back and repost when an interruption has occurred in the update process. Robust backup/restore and mirroring systems are also included to further protect your data. Backup functions can even be performed while the database is in use.

Scalability

Smart businesspeople know that their companies must grow in order to continue to prosper. One of the more painful aspects of growth can be updating your computer software systems to accommodate larger numbers of users, higher transaction volumes, and multi-processor systems. SQL Server is capable of taking advantage of multiple processors, and the large amounts of memory supported by the Windows 2000 Advanced Server, and thus can grow with your business.

Access to Information

Using the multiple methods of data access available, SQL Server data is readily available for access using the reporting tool of choice. ODBC, OLE-DB or ADO (Active Data Objects) can also be used to access the data in the accounting database for reporting, analysis and integration. SQL Server provides many tools that make it possible to assist you in these tasks, such as OLAP and DTS (Data Transformation Services.). *Data stored within SQL Server may be updated by anyone with the appropriate permissions; however, Sage Software does not recommend writing to, or otherwise directly updating, Sage MAS 200 application tables that bypass application business logic and data integrity checks.*

Tuning Wizard

One of the most significant features of SQL Server, the Tuning Wizard, monitors server usage history and makes recommendations to optimize performance. SQL Server allows a company to make full use of the capabilities of its hardware.

An important feature of the Tuning Wizard is SQL Server's dynamic memory management. This program automatically allocates additional memory as user load increases.

SQL Server is a proven RDBMS for small to midsized businesses.

Access to information is a key benefit of SQL Server for accounting and business management systems.

The dynamic space management feature also assures that the database will not run out of room and require manual expansion. Instead, the database grows dynamically as transactions are added. Similarly, when historical data is purged resulting in fewer records, the database will automatically shrink—freeing up disk space for other uses.

Backup/Restore

To avoid costly setbacks in the event of a power failure or other system interruption, an effective backup and restore routine is essential for every business. SQL Server backs up and restores data more efficiently than ever before. Backups can also be performed while the system is online without significant performance degradation.

OLAP

Online analytical processing (OLAP) lets analysts, managers, and executives gain insight into data through fast, consistent, interactive access to a wide variety of information views. Users can drill down through masses of sales statistics to focus on the information needed to make informed decisions. Using traditional methods, you might spend hours developing a complex query to answer the question, “What are our top five products in the five largest metropolitan areas in the southeastern United States?” OLAP can help you find the answer in a few minutes.

Using the OLAP features of SQL Server, you can quickly and easily create views into financial data to help you make critical decisions.

Sage MAS 200 and SQL Server

The Sage MAS 200 – SQL Server Edition implementation has been thoughtfully designed to take full advantage of the SQL Server features that are beneficial to accounting and business management software.

Commit and Rollback

One of the most important benefits of SQL Server for business management and accounting systems is the ability to commit transactions to the database one at a time, tracking the steps in the posting process. If an interruption occurs, the process can then “roll back” to the point in time before the interruption occurred. This way, the integrity of Sage MAS 200 data is maintained, invoices stay in balance, subsidiary ledgers match the general ledger, and audit trails remain intact.

Sage MAS 200 for SQL Server takes advantage of the SQL Server features that are beneficial for accounting and business management software. The commit and rollback feature maintains data integrity.

Stored Procedures and Triggers

Sage MAS 200 – SQL Server Edition implements these features, as required, enhancing performance. The chief benefit of stored procedures and triggers is that these program commands are executed at the database level. Since the commands and associated data do not have to travel across the network to be executed, performance is enhanced.

Data Security

With SQL Server, mission-critical data is stored in one secure place, where only those with specific user privileges can access it. Using role-based security, users can be given access to specified portions of the database for reporting and querying. While at the same time other sensitive data, such as payroll information, can be protected. Sage MAS 200 – SQL Server Edition is designed in such a way that users who operate the accounting system do not need to have access to the database directly, thus protecting your data from unauthorized access.

Data Warehousing and DTS

Sage MAS 200 data is stored in SQL Server in a format designed for optimum performance for the accounting system. Certain forms of data analysis, such as sales profitability, may need to be viewed in several ways to obtain a clear picture. SQL Server provides more than one way to accomplish this.

Data warehousing and Data Transformation Services (DTS) address this business need by providing a set of tools that allows you to extract, transform and consolidate data from multiple disparate sources into single or multiple destinations. This data can then be used for OLAP analysis, reporting or integration with other applications.

Summary

Sage MAS 200 – SQL Server Edition offers world-class business applications running on an outstanding database. With these two important tools, midsized businesses can enjoy power, flexibility, and functionality equivalent to enterprise-level systems in an affordable, quickly deployed and easily maintained system.

Hardware and Software Requirements

- Please refer to the latest *Sage MAS 200 for SQL Supported Platform Matrix*. This can be found at: <http://support.sagesoftwareinc.com/mas/>
- Refer to SQL Server documentation for its hardware requirements. Customers wishing to run Sage MAS 200 – SQL Server Edition will need to purchase SQL Server through established Microsoft channels, and install the SQL Server software prior to the Sage MAS 200 installation.

SQL Server stores all your mission-critical data in one secure container.

SQL Server combined with Sage MAS 200 business applications is an extremely safe, reliable and robust platform to run any business.

Certification Training

All of our channel partners must obtain the certifications listed below before they will be authorized to sell Sage MAS 200 – SQL Server Edition. The required Microsoft certifications may be held by not more than two persons employed by the partner. If two people hold the three required certifications jointly, then both employees must attend the Sage MAS 200 – SQL Server Edition class and pass the assessment.

Channel Partner Certification Requirements

The following are the certification requirements for channel partners to become certified to sell and implement Sage MAS 200 for SQL Server:

- Channel partners must pass three Microsoft certification exams listed below **before** attending the Sage MAS 200 – SQL Server Edition class:

Installing, Configuring, and Administering Microsoft Windows 2000 Server (Exam 70-215, Course 2152) or equivalent Windows 2003 Server Exam

Implementing and Administering a Microsoft Windows 2000 Network Infrastructure (Exam 70-216, Course 2153) or equivalent Windows 2003 Server Exam

Administering Microsoft SQL Server 7.0
(Exam 70-028, Course 832)

~ *or* ~

Administering a Microsoft SQL Server 2000 Database
(Exam 70-228, Course 2072)

- After Microsoft certification, following the above requirements, attendance at a Sage MAS 200 – SQL Server Edition class with a passing grade on the course assessment test.

Recommended Information Sources

Microsoft training and certification:

<http://www.microsoft.com/traincert/>

Microsoft SQL Server Home Page:

<http://www.microsoft.com/sql/>

Glossary of SQL Server Terms

Throughout this document, there are references to technical terms that may be unfamiliar to people who have not worked with relational databases. The following terms are frequently used when working with SQL Server databases:

Concurrency control – In a database management system, managing the simultaneous access to a database. Concurrency control prevents two users from editing the same record at the same time, and is also used with serializing transactions for backup and recovery.

ODBC (Open Database Connectivity) – A database-programming interface from Microsoft that provides a common language for Windows applications to access databases on a network. ODBC is made up of the function calls programmers write into their applications and the ODBC drivers themselves. ODBC supports SQL and non-SQL databases. Although the application always uses SQL Server to communicate with ODBC, ODBC will communicate with non-SQL databases in its native language.

OLAP (Online Analytical Processing) – This is decision-support software that allows the user to quickly analyze information that has been summarized into multidimensional views and hierarchies. For example, OLAP tools are used to perform trend analysis on sales and financial information. They can enable users to drill down into masses of sales statistics in order to isolate the products that are the most volatile.

Traditional OLAP products, also known as multidimensional OLAP, or MOLAP, summarize transactions into multidimensional views ahead of time. User queries on these types of databases are extremely fast, because most of the consolidation has already been done.

A relational OLAP (or ROLAP) tool extracts data from a traditional relational database. Using complex SQL statements against relational tables, it is able to create the multidimensional views on the fly.

A database OLAP (or DOLAP) refers to a relational database management system (RDBMS) that is designed to host OLAP structures and performs OLAP calculations.

Rollback – Rollback is a database management system feature that reverses the current transaction out of the database, returning the database to its former state. This occurs when some failure interrupts a half-completed transaction.

Stored Procedures and Triggers – A stored procedure is a SQL Server program that is stored in the database. It is executed by calling it directly from the client, or from a database trigger. When the SQL procedure is stored in the database, it does not have to be replicated in each client, saving programming effort. A trigger is a SQL procedure that is executed when a record is added, updated or deleted. A trigger may also execute a stored procedure. Triggers and stored procedures are built into database management systems used in client/server environments.



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