

Microsoft SQL Server™ 2005

Microsoft Dynamics™ CRM

Aligned to Deliver the Next Generation of Integrated Business Solutions

Microsoft® Dynamics™ is a line of financial, customer relationship and supply chain management solutions that help organizations work more effectively. Delivered through a network of channel partners providing specialized services, these integrated, adaptable business solutions work like and with familiar Microsoft software to streamline processes across an entire business.

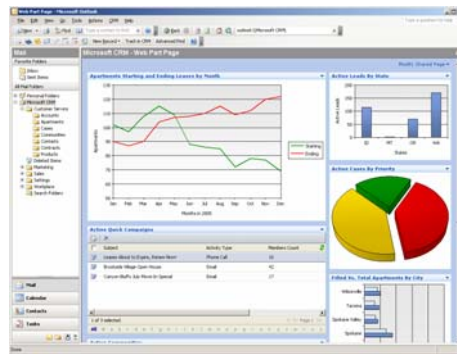
Integration with Microsoft SQL Server™ 2005 is key to delivering adaptable business solutions. Microsoft Dynamics CRM, is being designed to take advantage of the business intelligence, data management, enhanced performance and high-availability features of SQL Server 2005. Because Microsoft SQL Server is the chosen platform for Microsoft Dynamics CRM, customers will benefit from improved access to application data, simplified deployments, ease of maintenance and faster application response.

Seamless Access to Business Data

Microsoft is committed to delivering insight to all of the users of a business application, regardless of their roles in the company. With SQL Server 2005, businesses can extend the value of their Microsoft Dynamics CRM solution using a complete set of data-management tools and put critical, timely information in the hands of all employees. Additionally, managers can appropriately control access to data based on security and data integrity needs. From the CEO to the information worker, Microsoft Dynamics CRM users will benefit from integration with SQL Server 2005 by having the ability to:

- Generate reports using data from within Microsoft Dynamics CRM using SQL Server Reporting Services to author, manage, and deliver both paper-oriented and interactive, Web-based reports

- Structure data and tables from Microsoft Dynamics CRM into multi-dimensional cubes for easier viewing.
- Build and analyze data warehouses of any size.
- Organize and use data more efficiently with more memory and speed – resulting in faster decision-making.



Harnessing the combined power of SQL Server Reporting Services with Microsoft Dynamics CRM, users can seamlessly report on external and CRM data and can use any report types inside the CRM application, including Microsoft Office Excel®, Microsoft SharePoint®, Microsoft Access, Business Objects and more.

Simplify Installation and Management

In today's connected world, data and the systems that manage that data must always be available to users. With SQL Server 2005, users and IT professionals across the organization will benefit from reduced application downtime, increased scalability and performance, and tight security controls.

SQL Server 2005 provides Microsoft Dynamics CRM administrators enhanced capabilities to help ensure 24x7 operations and optimal performance, with automated and enhanced monitoring and tuning tools.

- **The Database Tuning Advisor (DTA)** is well suited to understanding and processing the thousands of indexes

existing in typical Microsoft Dynamics CRM implementations, and allows the database administrator to quickly analyze and implement database index improvements.

- **Surface Area configuration tools** improve manageability and security by giving administrators more control over the "surface area" of local and remote instances of SQL Server 2005. Administrators can easily enable or disable unused services, unused network protocols, or unused features of SQL Server 2005.
- Monitor backup procedures and the database with **alerts** for prompt notification if problems arise.

New SQL Server 2005 backup capabilities help keep data secure against almost any hardware problem or incident. Microsoft Dynamics CRM administrators can take advantage of fine grained error repairs, online backups and redo controlled by checkpoint to speed up recovery.

Online backups now allow Transaction Log backups to be performed at the same time. This is an advantage for Microsoft Dynamics CRM installations with 24x7 operations or ongoing batch processing during evening/off hours.

- SQL Server 2005 can **restore single pages** from online backups or transaction Log backups, all while the Microsoft Dynamics CRM installation remains operational.
- Multiple improvements in recovery lead to **faster failover time** for Microsoft Cluster Solutions (MSCS), as well as faster failover time for synchronous database mirroring with failover.

Enhanced Performance

Microsoft Dynamics CRM databases have thousands of indexes, and new online indexing capabilities within SQL Server 2005 increase application availability.

- **32-bit improvements and 64-bit support.** SQL Server 2005 support for up to four GB of memory in 32-bit implementations, and nearly unlimited memory in x64 implementations, enabling customers to deploy the largest Microsoft Dynamics CRM implementations by increasing the space available for ODBC cursors.
- SQL Server 2005 allows **partitioned Tables and Indexes.** A Microsoft Dynamics CRM installation can segment a very-large table (and its associated indexes) into multiple, manageable pieces, increasing performance and scalability. One of the key barriers to developer productivity has been the lack of integrated tools for database development and debugging. SQL Server 2005 will provide advancements that could fundamentally change the way that database applications are developed and deployed.

Enhanced High Availability

Enterprises running Microsoft Dynamics CRM business applications need 24x7 availability. Microsoft Dynamics CRM deployments support the new capabilities of SQL Server 2005 to enable highly available environments.

SQL Server customers are currently running applications with multi-terabyte databases and more than 99.998% availability.

- **Database Mirroring.**¹ Asynchronous and synchronous database mirroring with transparent failover help ensure that a hot-standby Microsoft Dynamics CRM database copy is rapidly available in the event of hardware failure. Database mirroring allows for geographical redundancy, with network traffic being encrypted by default.
- **Database Snapshot.** Allows for recovery from operator error by instantly creating persistent read-only copies of a Microsoft Dynamics CRM database at a point in time.
- **Online Indexing.** SQL Server 2005 can create a new Index, defragment and rebuild an existing Index, or drop an Index while the Microsoft Dynamics CRM installation remains online. These features significantly reduce the typical downtime needed for database maintenance, and are critical since a typical Microsoft Dynamics CRM implementation has hundreds of large Indexes.
- **Fine-Grained Online Repairs.** Allows the Database Administrator to work with the system at a granular level, leaving only part of the system off-line such as to check and restore data at the page level.

Leading TCO

SQL Server 2005 offers a compelling total cost of ownership (TCO) for Microsoft Dynamics CRM implementations. SQL Server 2005 is licensed per processor, not per core, reducing the database cost by a factor of three or more.

Customers can take advantage of SQL Server 2005 comprehensive

data management capabilities, including advanced data mining, integration services, business intelligence, high availability and manageability as standard features at no additional cost.

Microsoft Dynamics and Microsoft SQL Server: the Right Team

Microsoft Dynamics CRM developers and Microsoft SQL Server developers work closely throughout our development cycles to leverage critical customer data that factor into many new feature decisions. A result of this alliance is that Microsoft Dynamics CRM has selected Microsoft .NET as the best way to deliver the new generation of Web services applications. Microsoft Dynamics CRM takes advantage of Microsoft's Web Services and .NET software, and Microsoft is using the leading customer relationship management (CRM) capabilities of Microsoft Dynamics CRM.

¹ Database mirroring is currently included in SQL Server 2005 for testing and non-productive environments. After launch, Microsoft plans to release an update that will enable database mirroring for production environments.