



SQL Server 2005

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Microsoft release SQL Server 2005 a couple of years ago and plans to release SQL Server 2008 next year. This white paper discusses the differences between SQL Server 2005 and SQL Server 2000 and provides some insight into upgrading to SQL Server 2005.

Reasons to Upgrade to SQL Server 2005

- 1. Improved performance.**
- 2. Replace an existing MSDE System.**

Reasons to wait for SQL Server 2008

- 1. You may experience some frustration with differences between SQL Server 2005 Management Console and SQL 2000 Enterprise Manager.**
- 2. SQL Server 2008 should be released in mid-2008.**

With SQL Server 2005 you should get Improved Performance

In a white paper from Microsoft dated May, 2005 and entitled "SQL Server 2005: Decision Support Scalability Improvements", Microsoft ran performance benchmark tests between SQL 2000 and SQL 2005. A series of queries were run against SQL Server 2000 and SQL Server 2005 to determine the effects of these changes on performance and resource utilization. Among the key results are the following:

- SQL Server 2005 has significantly improved the response time for certain DSS-type queries compared with SQL Server 2000.
- SQL Server 2005 and SQL Server 2000 consume equivalent amounts of CPU for the same types of queries.
- SQL Server 2005 generates equivalent or faster disk reads for the given queries than does SQL Server 2000.

A second series of tests compared the scalability of SQL Server 2005 with four or eight processors. Among the key results were the following:

- The speed with which query results are returned increases linearly with additional CPU.
- Overall, disk reads are faster when scaling from four to eight processors.
- System resource usage is very similar for both four and eight processor configurations.

"Based on these performance tests, the results indicate that for complex queries, SQL Server 2005 performance and scalability exceeds that of SQL Server 2000. Additionally, these results demonstrate that SQL Server 2005 can make effective use of industry-

leading block-based storage technologies like the Network Appliance FAS920 Storage System.”

What does this all mean?

SQL Server 2005 may be faster than SQL 2000, especially as the server is beefed up to include more memory and more processors. 64-bit processors will also perform better under SQL Server 2005.

The Free SQL Server 2005 Express is a significant improvement over the free MSDE System

MSDE (Microsoft Database Engine) is a free database engine based on the same engine as SQL Server. halFILE supported MSDE for up to 3 users. However, there was no administration tool available so it was difficult to administer.

SQL Server 2005 Express replaces MSDE and includes a more robust and powerful engine, Full Text search support and the Management Console tool. halFILE support SQL Server 2005 Express for up to 5 users.

NOTE: We do NOT recommend replacing a full SQL Server 2000 with the free SQL Server 2005 Express. If you want to upgrade, go ahead and purchase the full SQL Server 2005.

If you are migrating from MSDE to SQL Server 2005 Express, then use the following link:

<http://msdn2.microsoft.com/en-us/express/bb410792.aspx>

And download the SQL Server 2005 Express Edition with **Advanced Services SP2**. This will include the SQL Server Management Console Tool. Note: This is a 234MB download.

Just to get on the latest SQL Server Version is not a good reason to upgrade to SQL 2005

- There is a learning curve to the SQL Server Management Console.
- It seems from the literature that SQL Server 2005 performance improvements increase exponentially as the hardware power increases. So, it depends on your server box as to how much of a performance boost you will gain.
- SQL Server 2008 is coming soon. It has been released to the technology community for preview and should be released sometime after 1st quarter of 2008.

Replacing a full SQL Server 2000 with SQL Server 2005 Express is not a good idea

- SQL Server 2000 includes SQL Agent for scheduling jobs. SQL Server 2005 Express does not have this tool.
- While both products have full text database capabilities, SQL Server 2005 does not have the administration screens in Management Console to manage them.
- hal Systems does not recommend SQL Server 2005 Express for system having more than 5 users.

Installation of SQL Server 2005

Services – SQL Server Configuration Manager

- SQL Server 2005 Services
 - SQL Server
 - SQL Server Browser – required to be able to find SQL Server by Server name
 - SQL Agent
 - SQL Server Integration Services
 - SQL Server Fulltext Search
 - SQL Server Analysis Services
- SQL Server 2005 Network Configuration
 - Protocols for MSSQLSERVER
 - TCPIP

Named instances: servename\sqlexpress if SQL2005 Express is being used.

Migration

- Install SQL Server 2005 .
- Detach/Copy/Attach all databases.
- Script out jobs and import them on new server (may not always work).
- Change File DSNs.
- Run Createdb.exe to define new server as server for new databases.
- Modify Crystal Reports to point to new SQL Server.

Query Analyzer Replaced by SQL Server Management Studio

- Tree is similar so if you poke around, you will probably find what you are looking for.
- New Query button opens the Query Window.
- Open Table lets you edit a table. Then to limit the records shown on the Open Table screen, use SQL button to run a query.