

SQL Server: Transact-SQL Basic Data Retrieval

Module 2: Setting up a Transact-SQL Learning Environment

Joe Sack

Joe@SQLskills.com



Module Introduction

- **The best way to learn Transact-SQL is to do hands-on practice as you follow along in this course**
- **In this module:**
 - Installing SQL Server 2012 Express with Tools
 - Installing SQL Server Data Tools
 - Downloading and attaching the sample database
 - Executing a basic data retrieval query in SSMS and SSDT

SQL Server 2012 Express with Tools

- In order to practice the concepts we discuss in this course, I recommend installing an instance of the SQL Server 2012 Express database engine
- SQL Server 2012 Express is a *free* edition that can be used for learning the product and features
- We'll be using SQL Server 2012 Express with Tools
 - SQL Server 2012 Database Engine
 - SQL Server Management Studio Express

SQL Server 2012 Express (Abridged) Requirements

- **Choose a laptop, desktop or test server with the following:**
 - An internet connection from the computer you're installing it on
 - A minimum of 6 GB of hard-disk space
 - Minimum 512 MB RAM
 - Recommended 1 GB
 - Minimum of 1.0 GHz (x86) or 1.4 GHz (x64)
 - Recommended 2.0 GHz or faster
 - Storage types supported
 - Local disk
 - Shared storage (SAN, for example)
 - SMB File Share

SQL Server 2012 Express (Abridged) Requirements

- OS versions (see <http://bit.ly/zKHAKL> for full details):
 - Windows Server 2008 R2 SP1 64-bit (Standard, Enterprise and more)
 - Windows 7 SP1 32-bit and 64-bit (Home Basic, Home Premium, Enterprise, Professional and more)
 - Windows Server 2008 SP2 64-bit and 32-bit (Standard, Enterprise and more)
 - Windows Vista SP2 32-bit and 64-bit (Home Basic through Ultimate and more)

- You can download from <http://bit.ly/KJIAMR> or search on the keywords “Download Microsoft SQL Server 2012 Express with Tools”
 - Tip: SQLEXPRT_x64_ENU.exe is the “Express with Tools” version (and there is an x86 version as well)

SQL Server Management Studio Express

- SQL Server Management Studio (SSMS) Express is a free graphical management tool that is commonly used both by Database Administrators *and* Developers
 - Manage the database engine plus Transact-SQL query execution
- SQL Server Data Tools (SSDT) does offer more developer-centric functionality not provided in SSMS

SQL Server Data Tools

- As an alternative or supplement to SQL Server Management Studio (SSMS), you can also use SQL Server Data Tools (SSDT) in order to familiarize yourself with SQL Server 2012 Transact-SQL
- Whereas SSMS bridges both the administrator and developer worlds, SSDT is specific to the database developer audience, allowing for database design and query development
- If you've worked with Visual Studio before, SSDT will already be familiar to you
- SSDT is also *free* and you can download from <http://bit.ly/blGImY> or search on the keywords "SQL Server Data Tools"

SQL Server Data Tools OS Requirements

- OS versions (see <http://bit.ly/zKHAKL> for details):
 - Windows Server 2008 R2 SP1 64-bit (Standard, Enterprise and more)
 - Windows 7 SP1 32-bit and 64-bit (Home Basic, Home Premium, Enterprise, Professional and more)
 - Windows Server 2008 SP2 64-bit and 32-bit (Standard, Enterprise and more)
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AdventureWorks2012 Sample Database

- CodePlex (<http://www.codeplex.com/>) provides various sample databases which you can use to follow along with the Transact-SQL examples in this course
- AdventureWorks2012 database
- You can download from <http://msftdbprodsamples.codeplex.com/> or search on the key words “Adventure Works for SQL Server 2012”
 - Download from the “AdventureWorks2012 Data File” link
- I'll show you how to attach the database in the next demo

Basic data retrieval query in SSMS and SSDT

- **SSMS or SSDT for data retrieval – which one should you use?**
- **The next two demos will show you a basic SELECT query using both tools, and then you can decide for yourself**
 - Don't worry about understanding all the mechanics of the data retrieval examples – we'll be walking through the key data retrieval concepts throughout this course