SQL Server and SSMS

Introduction to SQL Server

* SQL Server is an relational database management system developed by Microsoft.

* It is comprised of two parts: a database server that has no graphical user interface and is responsible solely as a storage mechanism for data and a database management system called Management Studio, that is used to manage the database server, permissions and roles, and more via a graphical user interface.

* As a database server, it is a software product with the primary function of storing and retrieving data as requested by other software applications—which may run either on the same computer or on another computer across a network (including the Internet).

* Microsoft markets at least a dozen different editions of Microsoft SQL Server, aimed at different audiences and for workloads ranging from small single-machine applications to large Internet-facing applications

SQL Server and SSMS

SQL Server mainstream editions

* **Enterprise:** Includes both the core database engine and add-on services, with a range of tools for creating and managing a SQL Server cluster. It can manage databases as large as 524 petabytes and address 12 terabytes of memory and supports 640 logical processors (CPU cores).

* **Standard:** Includes the core database engine, along with the stand-alone services. It differs from Enterprise edition in that it supports fewer active instances (number of nodes in a cluster) and does not include some high-availability functions.

* **Web:** SQL Server Web Edition is a low-TCO option for Web hosting.

* **Business Intelligence:** Focuses on Self Service and Corporate Business Intelligence. It includes the Standard Edition capabilities and Business Intelligence tools.

* **Express:** A scaled down, free edition of SQL Server, which includes the core database engine. While there are no limitations on the number of databases or users supported, it is limited to using one processor, 1 GB memory and 10 GB database files.

SQL Server and SSMS

Introduction to SQL Server Management Studio (SSMS)

* SQL Server Management Studio (SSMS) is a software application first launched with Microsoft SQL Server 2005.

* It is used for configuring, managing, and administering all components within Microsoft SQL Server.

* The tool includes both script editors and graphical tools which work with objects and features of the server.

* A central feature of SSMS is the Object Explorer, which allows the user to browse, select, and act upon any of the objects within the server.

Let's take a look glance at SQL Server Management Studio so you can see the power of this rich enterprise-