



SQL Server 2005

Introduction to SQL Server 2005



SQL Server 2005 basic tools

- SQL Server Configuration Manager
 - SQL Server services management
 - Start, Stop, Restart, ecc..
 - Network protocol configuration
- SQL Server Management Studio
 - OLAP and OLTP server management
 - Database creation and management
 - SQL query execution
 - Query execution plan analysis



SQL Server 2005 basic tools

- SQL Server Business Intelligence Development Studio
 - Integration Services Project
 - ETL processing
 - Analysis Services Project
 - OLAP analysis
 - Data mining
 - Report Server Project
 - Report creation



SQL Server data warehousing

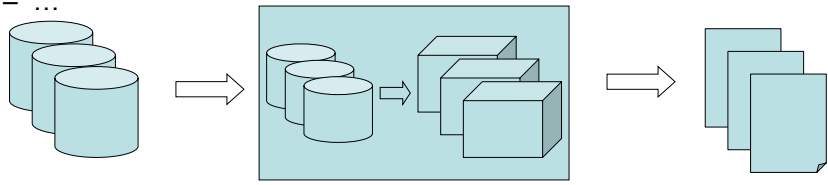
Operational data sources

- Relational DBs
- Excel spreadsheets
- ...

Data warehouse

- Staging Area
- Cubes

Report



SQL Server 2005

Report Server

Analysis services
Integration services

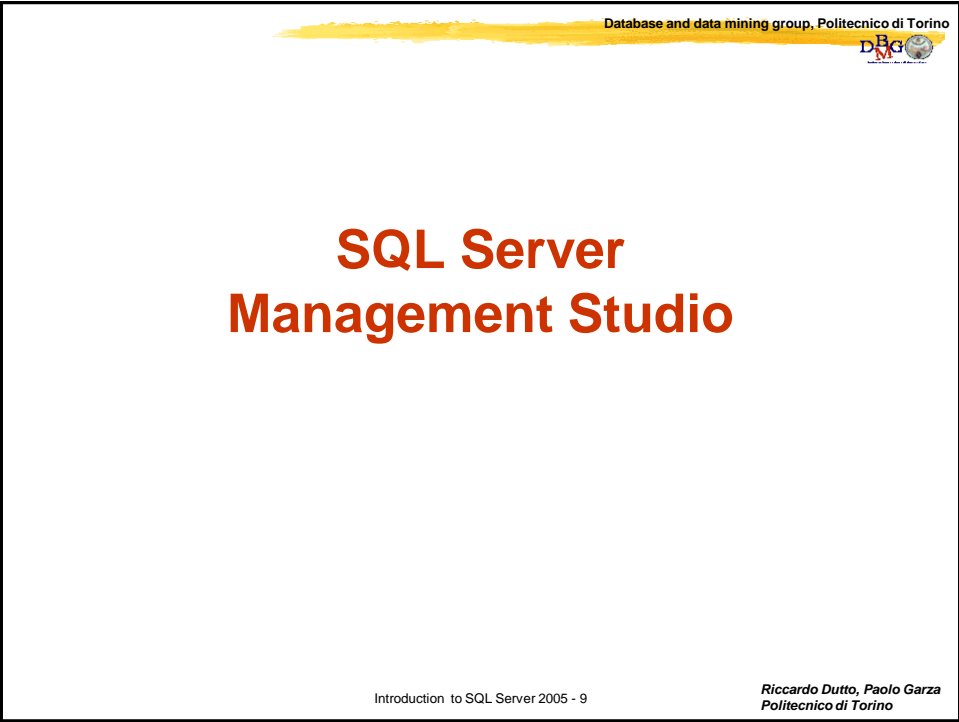
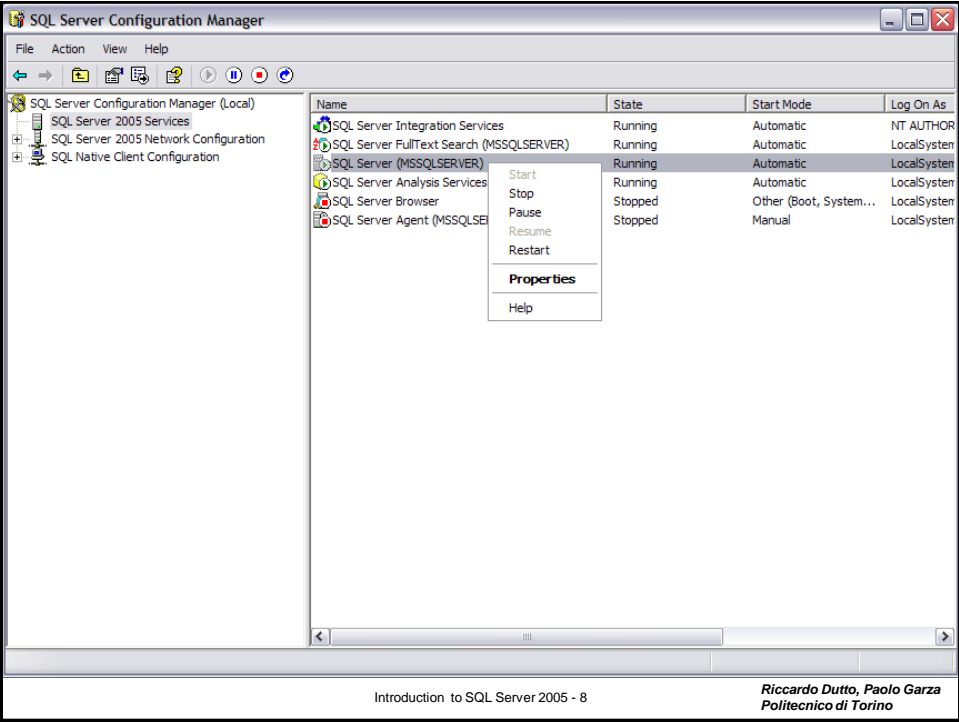


SQL Server Configuration Manager



SQL Server Configuration Manager

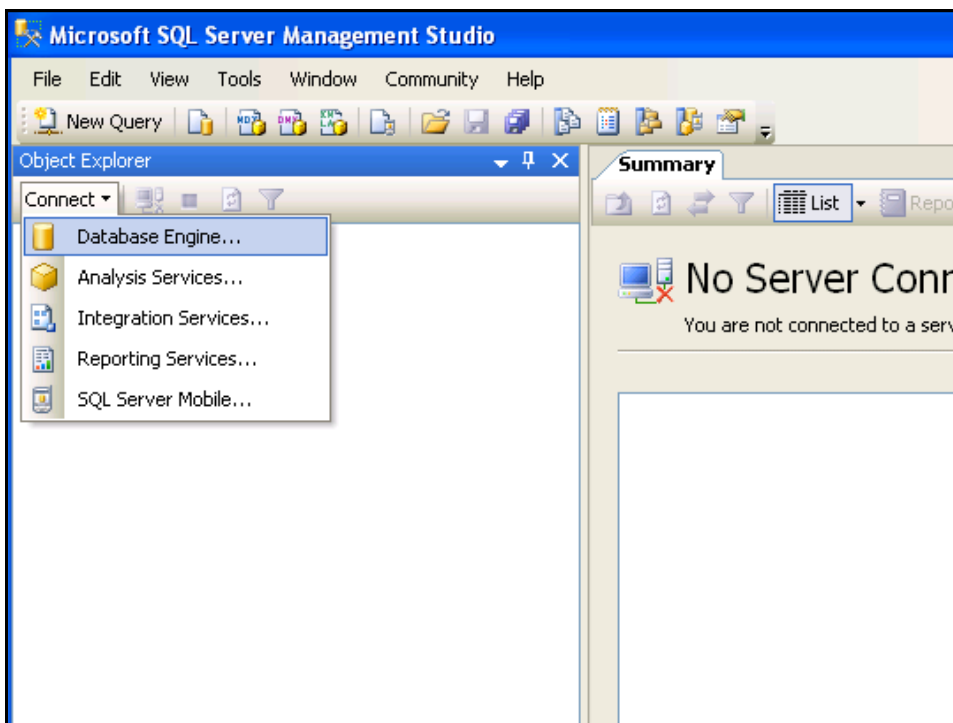
- SQL Server 2005 user interface for managing services
 - Start, Stop, ..
- Network protocol configuration





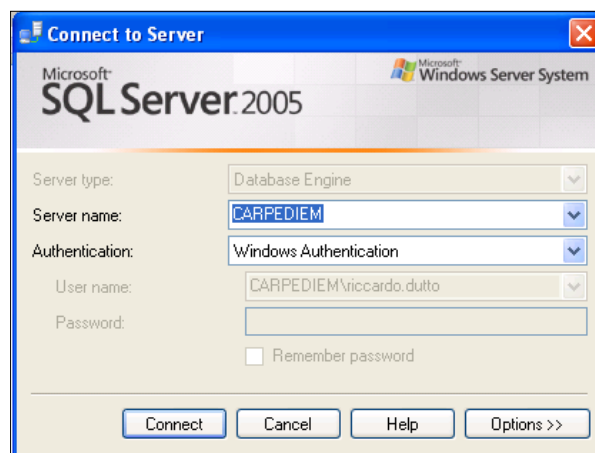
Connecting to SQL Server

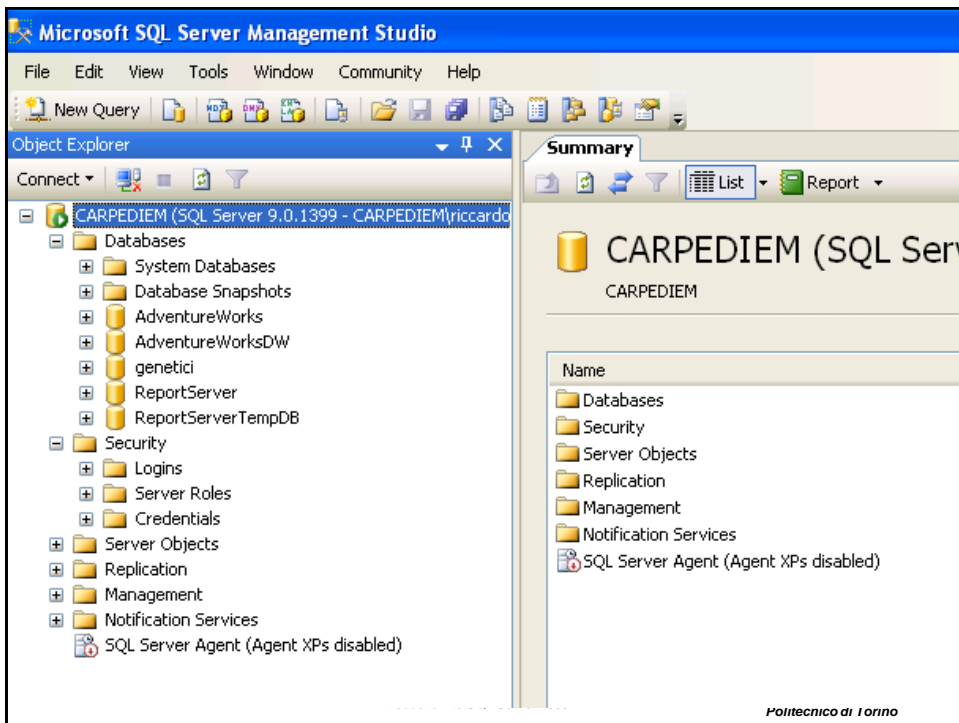
- Run SQL Server Management Studio
- Select the service or database engine to connect to
 - Database engine
 - Relational database (OLTP)
 - Analysis services
 - OLAP server



Connecting to SQL Server (2)

- Write the name of the server to connect to
- Authenticate by means of one of the following methods
 - Windows user authentication
 - Username/password authentication
 - Managed by an internal SQL Server module





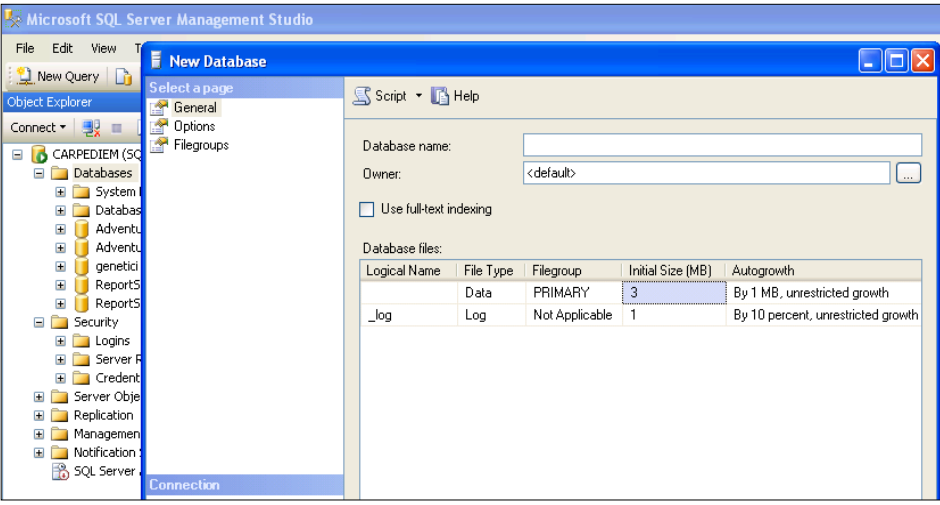
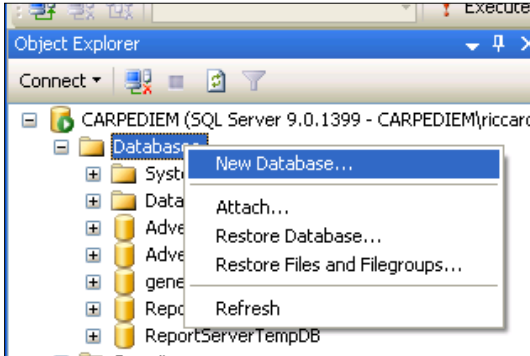
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Creating a new database

- From "Databases" choose
 - "New Database"
- Choose a name for the new database
- Optional
 - Change the settings for the data file and the log file
 - Autogrowth, ...
 - Change the general database options
 - Auto create statistics, ...

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Creating a new database (2)

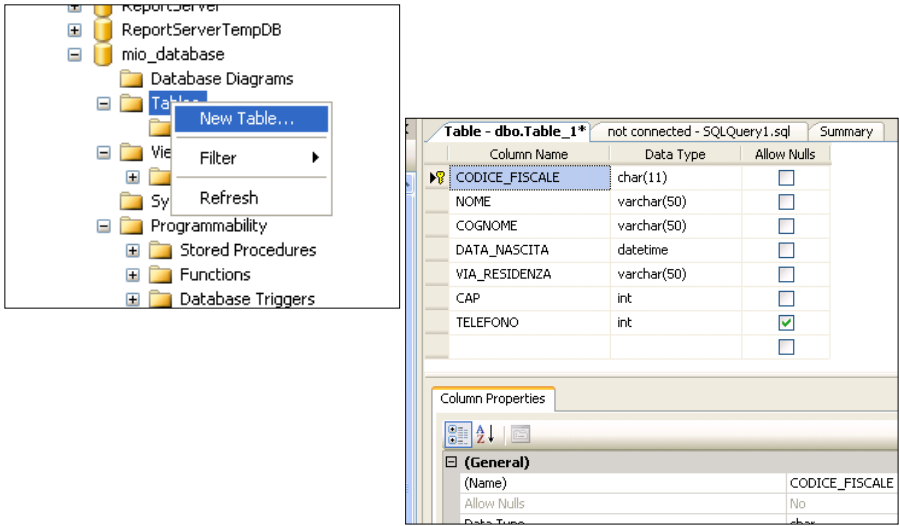
- After creating the new database you can
 - Set the authorizations for the system users
 - Create Tables
 - Create Views
 - Create Trigger
 - ...



Creating tables

- You can create new tables using
 - The grafic wizard (similar to Access)
 - Choose the name of the fields
 - Set the type of the fields
 - Set possible constraints (“allow nulls”)
 - Define the primary key
 - Define possible foreign keys
 - A SQL script
 - Allows batch processing

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The screenshot shows the SQL Server Enterprise Manager interface. On the left, a tree view displays the 'mio_database' folder expanded to show 'Tables'. A context menu is open over 'Tables', with 'New Table...' selected. On the right, the 'Table - dbo.Table_1*' properties window is open, showing a table with the following columns:

Column Name	Data Type	Allow Nulls
CODICE_FISCALE	char(11)	<input type="checkbox"/>
NOME	varchar(50)	<input type="checkbox"/>
COGNOME	varchar(50)	<input type="checkbox"/>
DATA_NASCITA	datetime	<input type="checkbox"/>
VIA_RESIDENZA	varchar(50)	<input type="checkbox"/>
CAP	int	<input type="checkbox"/>
TELEFONO	int	<input checked="" type="checkbox"/>

Below the table, the 'Column Properties' section is visible, showing the 'General' tab with the following details:

Property	Value
(Name)	CODICE_FISCALE
Allow Nulls	No
Data Type	char

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Executing SQL statements

- Choose the database
- Use the “New Query” command
- Edit the SQL statement
- Parse the statement for errors
- Execute the SQL statement

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Esecuzione di comandi SQL (2)

Executing the SQL statement
Parse the statement for errors
Query execution plan

