



# SQL Query for SQL Server User's Manual

© 1999-2025 EMS Software Development

# SQL Query for SQL Server User's Manual

#### © 1999-2025 EMS Software Development

All rights reserved.

This manual documents EMS SQL Query for SQL Server

No parts of this work may be reproduced in any form or by any means - graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems - without the written permission of the publisher.

Products that are referred to in this document may be either trademarks and/or registered trademarks of the respective owners. The publisher and the author make no claim to these trademarks.

While every precaution has been taken in the preparation of this document, the publisher and the author assume no responsibility for errors or omissions, or for damages resulting from the use of information contained in this document or from the use of programs and source code that may accompany it. In no event shall the publisher and the author be liable for any loss of profit or any other commercial damage caused or alleged to have been caused directly or indirectly by this document.

Use of this documentation is subject to the following terms: you may create a printed copy of this documentation solely for your own personal use. Conversion to other formats is allowed as long as the actual content is not altered or edited in any way.

Document generated on: 20.01.2025

# **Table of Contents**

## Part I Welcome to EMS SQL Query!

What's new	8
System requirements	9
Installation	10
Registration	11
How to register SQL Query	13
EMS SQL Query FAQ	14
Other EMS Products	16

7

23

## Part II Getting Started

First time started	
Database navigation	
Working with gueries	29
Using context menus	
Host context menu	
Database context menu	
Query context menu	
Importing settings	
Selecting program language	35
FMS SQL Query Tools	37

## Part III EMS SQL Query Tools

Database Explorer	38
Managing database registration info	39
Connecting to databases	40
Viewing brief DB info	40
Viewing query history	41
SQL Assistant	43
Database management tools	45
Register Host Wizard	47
Setting connection properties	47
Setting registration options	
Register Database Wizard	51
Setting connection properties	51
Setting registration options	53
Database Registration Info dialog	
Editing connection properties	
Setting database options	56
Setting log options	57
Query management tools	59
SQL Editor	60
Working with SQL editor area	60

Using the context men	ﺎ	61
Find Text dialog		
Replace Text dialog		
Executing queries		
Visual Query Builder		68
Working with Query B	uilder area	
Joining tables		
Setting criteria		
Setting output fields		
Setting grouping criter	a	
Setting sorting parame	ers	
Working w ith the edito	area	
Query execution		
Query History		81
Query Plan		81
Favorite Queries		
ata management tool	s	
Data View		94
		۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰
Grouping uata		
Printing data		
Frinking data		
Exporting result	t monu	
Form View		
Viewing as Her	adecimal	
Viewing as Tex		
Viewing as Rick	text	94
Viewing as Ima	۵	
Viewing as HTM	G	90 QF
Diagram View		97
Selecting fields		98
Setting diagram	nonerties	98
Editing Chart dia	og	100
Chart	Jg	100
Sorios		
General		101
General		
Titlos		104
Logond		
Legena		
Parier		
Paging		
Waiis		
3D Series		
Series		
Data		
Export		
Print		
Exporting diagra	nas Irrage	
Setting file r	ame and Iomat	
Export Diag	am options	
Custom Filter		

nvoking the Filter Builder dialog	17
Adding a new condition	17
Setting filter criteria	18
Setting filter operator	19
Setting filter criteria values	20
Adding a new group	21
Setting group operator	22
Applying filter conditions	23

## **Part IV Personalization**

5

1	2	6
---	---	---

	Options	
	Environment options	
	Preferences	
	Default Sheet	
	Confirmations	
	DB Explorer	
	Query Builder	
	Color Palette	
	Fonts	
	Grid	
	Report	
	Localization	
	Editor options	
	General	
	Display	
	Color	
	Quick code	
	Visual options	
	Bars and Menus	
	Trees and Lists	
	Edit controls	
	Check boxes	
	Buttons	
	Page controls	
	Group boxes	
	Splitters	
	Save Settings	
	Specifying destination file	
	Selecting settings	
	Selecting databases	
	Keyboard templates	165
	Localization	
Part V	Appendix	169
	Customize toolbars and menus	



## 1 Welcome to EMS SQL Query!

**EMS SQL Query for SQL Server** is the tool that allows you to manage SQL queries to your SQL Server databases quickly and simply. Visual building as well as direct editing of query text is available. User-friendly graphical interface allows you to connect to databases, select tables and fields for your queries, set selection criteria and much more. You can work with several queries at once, edit queries and view the execution results in several modes and perform other operations you may need in your everyday work with SQL Server databases.

Visit our web-site for details: <u>https://www.sqlmanager.net/</u>

#### Key features

- User-friendly graphical interface
- Charsets and collations support for databases and tables provided
- Using drag-and-drop operations when selecting tables and fields for a query visually
- Working simultaneously with several queries in separate windows
- Registering databases for working with the required databases only
- Multiple database connections
- Navigation within recently used queries and selecting the required queries
- Syntax highlight, "quick code" and keyboard templates for faster editing query text
- Tools for data grouping and filtering
- The ability to create queries with unions and subqueries visually
- The ability to create diagrams based on queries
- Capabilities for viewing query plans
- Flexible personalization of graphical user interface
- Multi-language GUI support

#### **Product information**

 Homepage:
 https://www.sqlmanager.net/products/mssql/query

 Support
 https://www.sqlmanager.net/support

 Ticket
 system:

 Register on https://www.sqlmanager.net/products/mssql/query/buy

 line at:
 https://www.sqlmanager.net/products/mssql/query/buy

## 1.1 What's new

8

Version SQL Query for SQL Server 3.4.1 Release date March 27, 2020

### What's new in SQL Query?

- Implemented support for Azure, SQL Server 2017.
- The error occured on simultaneous registering of several databases. Fixed now.
- The error was duplicated on switching between editor tabs. Fixed now.
- Other fixes and improvements.

We hope you'll enjoy working with our products.

## 1.2 System requirements

#### **System requirements**

- Microsoft Windows XP, Microsoft Windows Server 2003, Microsoft Windows Server 2008, Microsoft Windows Server 2008 R2, Microsoft Windows Server 2012, Microsoft Windows Server 2012 R2, Microsoft Windows Server 2016, Microsoft Windows Vista, Microsoft Windows 7, Microsoft Windows 8/8.1, Microsoft Windows 10
- 512 MB RAM or more; 1024 MB or more recommended
- 50 MB of available HD space for program installation
- Microsoft Data Access Components (MDAC) or SQL Server Native Client
- Possibility to connect to any local or remote SQL Server™
- Supported MS SQL Server versions: from 7.0 up to 2017

## 1.3 Installation

#### If you are installing SQL Query for SQL Server for the first time on your PC

- download the SQL Query for SQL Server distribution package from the <u>download page</u> available at our site;
- unzip the downloaded file to any local directory, e.g. *C*:\unzipped;
- run *MsQuerySetup.exe* from the local directory and follow the instructions of the installation wizard;
- after the installation process is completed, find the SQL Query for SQL Server shortcut in the corresponding group of Windows Start menu.

## If you want to upgrade an installed copy of SQL Query for SQL Server to the latest version

- download the SQL Query for SQL Server distribution package from the <u>download</u> page available at our site;
- unzip the downloaded file to any local directory, e.g. C:\unzipped;
- close SQL Query application if it is running;
- run *MsQuerySetup.exe* from the local directory and follow the instructions of the installation wizard.

Also you can use the full distribution package to upgrade your current version of SQL Query for SQL Server. In this case, you should repeat the steps you have made for the first-time installation. Note that the full distribution package is larger than a single executable file.

See also: EMS SQL Query FAQ

10

## 1.4 Registration

All purchases are provided by **PayPro Global** registration service. The **PayPro Global** order process is protected via a secure connection and makes on-line ordering by credit/ debit card quick and safe.

**PayPro Global** is a global e-commerce provider for software and shareware sales via the Internet. It accepts payments in US Dollars, Euros, Pounds Sterling, Japanese Yen, Australian Dollars, Canadian Dollars or Swiss Franks by Credit Card (Visa, MasterCard/EuroCard, American Express, Diners Club), Bank/Wire Transfer.

If you want to review your order information, or you have questions about ordering or payments please visit our <u>PayPro Global Shopper Support</u>, provided by **PayPro Global**.

Please note that all of our products are delivered via ESD (Electronic Software Delivery) only. After purchase you will be able to immediately download the registration keys. Also you will receive a copy of registration keys by email. Please make sure to enter a valid email address in your order. If you have not received the keys within 2 hours, please, contact us at sales@sqlmanager.net.

Product distribution	PayPro Global
<b>SQL Query for SQL Server</b> (Business license) + 1-Year Maintenance*	
<b>SQL Query for SQL Server</b> (Business license) + 2-Year Maintenance*	
<b>SQL Query for SQL Server</b> (Business license) + 3-Year Maintenance*	
<b>SQL Query for SQL Server</b> (Non-commercial license) + 1-Year Maintenance*	<u>Register now!</u>
<b>SQL Query for SQL Server</b> (Non-commercial license) + 2-Year Maintenance*	
<b>SQL Query for SQL Server</b> (Non-commercial license) + 3-Year Maintenance*	
SQL Query for SQL Server (Trial version)	Download Now!

\*EMS Maintenance Program provides the following benefits:

- Free software bug fixes, enhancements, updates and upgrades during the maintenance period
- Free unlimited communications with technical staff for the purpose of reporting Software failures
- Free reasonable number of communications for the purpose of consultation on operational aspects of the software

After your maintenance expires you will not be able to update your software or get technical support. To protect your investments and have your software up-to-date, you need to renew your maintenance.

You can easily reinitiate/renew your maintenance with our on-line, speed-through Maintenance Reinstatement/Renewal Interface. After reinitiating/renewal you will receive a confirmation e-mail with all the necessary information.

### See also:

How to register EMS SQL Query

## 1.5 How to register SQL Query

13

To register your newly purchased copy of EMS SQL Query for SQL Server, perform the following steps:

- receive the notification letter from PayPro Global with the registration info;
- enter the Registration Name and the Registration Key from this letter;
- make sure that the registration process has been completed successfully check the registration information in the About SQL Query for SQL Server dialog (use the Help | About menu item to open this dialog).

Register SQL Query for SQL Server	×
Please enter the registration information you received when purchasing SQL Query for SQL Server.	
Registration <u>N</u> ame	
Registration <u>K</u> ey	
<u>R</u> egister <u>L</u> ater <u>H</u> elp	

## See also:

**Registration** 

## 1.6 EMS SQL Query FAQ

Please read this page attentively if you have questions about SQL Query for SQL Server.

#### **Table of contents**

#### **Product questions**

- What is EMS Query for SQL Server?
- What do I need to start working with EMS Query for SQL Server?
- What is the difference between the Query Builder module in SQL Manager for SQL Server and the standalone SQL Query application?
- Are there any limitations implied in the trial version as compared with the full one?

#### Troubleshooting

- <u>I cannot figure out how I can use the Export dataset function</u>. Why I press the Export Data toolbar button, nothing happens.
- I get the following error: 'ERROR: Query was canceled.' when I try to execute a query in SQL Editor or when I perform some operations with database objects.
- <u>I use a UTF-8 database</u>. Native characters are shown incorrectly in the query result. What is wrong?

#### **Question/answer list**

#### **Product questions**

- Q: What is EMS Query for SQL Server?
- A: EMS SQL Query for SQL Server is a utility that lets you quickly and simply build SQL queries to SQL Server databases. Visual building as well as direct editing of a query text are available. User-friendly graphical interface allows you to connect to databases, select tables and fields for a query, set the selection criteria and much more. You can work with several queries at once, edit queries and view the execution results in one of the available modes and perform any other operations you may need in your work with database queries.
- Q: What do I need to start working with EMS SQL Query?
- A: First of all, you must have a possibility to connect to some local or remote SQL Server to work withSQL Query. You can download SQL Server from <u>https://www.microsoft.</u> <u>com/downloads/</u> (download is free). Besides, you need your workstation to satisfy the <u>system requirements</u> of SQL Query for SQL Server.
- Q: What is the difference between the Query Builder module in SQL Manager for SQL Server and the standalone SQL Query application?
- A: First of all, SQL Query for SQL Server works faster as it is a considerably lighter application. Besides, it provides additional features for query building, namely:
  - "favorite" queries to find and execute often used queries quickly;
  - saving <u>query history</u> which allows you to rollback to any of the previous queries;
  - various interface improvements for easier and more productive work.

- Q: Are there any limitations implied in the trial version as compared with the full one?
- A: Actually the trial version of the utility does not differ from the full version as far as the functionality is concerned. That is, you can test all the features implemented in SQL Query for SQL Server within the 30-day trial period.

Scroll to top

#### Troubleshooting

*Q*: I cannot figure out how I can use the Export dataset function. Why I press the Export Data toolbar button, nothing happens.

A: Please make sure that you have the latest version of EMS Data Export for SQL Server installed on your system. Note that the export utility should be registered and run at least once before you use the <u>Exporting results</u> function.

- Q: I get the following error: 'ERROR: Query was canceled.' when I try to execute a query in SQL Editor or when I perform some operations with database objects.
- A: You need to increase the SQL TimeOut value within the <u>Preferences</u> tab of the <u>Environment Options</u> dialog, or set it to 0 (unlimited).
- Q: I use a UTF-8 database. Native characters are displayed incorrectly in the query result. What is wrong?
- A: You need to set Font charset in the <u>Database Registration Info</u> dialog.

Scroll to top

If you still have any questions, contact us at our Support Center.

#### 1.7 Other EMS Products

#### **Quick navigation**



#### **MySQL**

16



#### SQL Management Studio for MySQL

EMS SQL Management Studio for MySQL is a complete solution for database administration and development. SQL Studio unites the must-have tools in one powerful and easy-to-use environment that will make you more productive than ever before!



<u>SQL Manager for MySQL</u> Simplify and automate your database development process, design, explore and maintain existing databases, build compound SQL query statements, manage database user rights and manipulate data in different ways.



#### Data Export for MySQL

Export your data to any of 20 most popular data formats, including MS Access, MS Excel, MS Word, PDF, HTML and more.



#### Data Import for MySQL

Import your data from MS Access, MS Excel and other popular formats to database tables via user-friendly wizard interface.

#### Data Pump for MySQL

Migrate from most popular databases (MySQL, PostgreSQL, Oracle, DB2, InterBase/Firebird, etc.) to MySQL.



#### Data Generator for MySQL

Generate test data for database testing purposes in a simple and direct way. Wide range of data generation parameters.



#### DB Comparer for MySQL

Compare and synchronize the structure of your databases. Move changes on your development database to production with ease.



#### DB Extract for MySQL

Create database backups in the form of SQL scripts, save your database structure and table data as a whole or partially.



#### SQL Query for MySQL

Analyze and retrieve your data, build your queries visually, work with query plans, build charts based on retrieved data quickly and more.



#### Data Comparer for MySQL

Compare and synchronize the contents of your databases. Automate your data migrations from development to production database.

Scroll to top

#### **Microsoft SQL Server**

#### SQL Management Studio for SQL Server

EMS SQL Management Studio for SQL Server is a complete solution for database administration and development. SQL Studio unites the must-have tools in one powerful and easy-to-use environment that will make you more productive than ever before!



#### EMS SQL Backup for SQL Server

Perform backup and restore, log shipping and many other regular maintenance tasks on the whole set of SQL Servers in your company.



#### SQL Administrator for SQL Server

Perform administrative tasks in the fastest, easiest and most efficient way. Manage maintenance tasks, monitor their performance schedule, frequency and the last execution result.



#### SQL Manager for SQL Server

Simplify and automate your database development process, design, explore and maintain existing databases, build compound SQL query statements, manage database user rights and manipulate data in different ways.



#### Data Export for SQL Server

Export your data to any of 20 most popular data formats, including MS Access, MS Excel, MS Word, PDF, HTML and more



#### Data Import for SQL Server

Import your data from MS Access, MS Excel and other popular formats to database tables via user-friendly wizard interface.

_	_	-		
	-	-		
	-			
-		-	1	

#### Data Pump for SQL Server

Migrate from most popular databases (MySQL, PostgreSQL, Oracle, DB2, InterBase/Firebird, etc.) to Microsoft® SQL Server™.

## 5

#### Data Generator for SQL Server

Generate test data for database testing purposes in a simple and direct way. Wide range of data generation parameters.



#### DB Comparer for SQL Server

Compare and synchronize the structure of your databases. Move changes on your development database to production with ease.

_	
	-
_	
	_

#### DB Extract for SQL Server

Create database backups in the form of SQL scripts, save your database structure and table data as a whole or partially.

#### SQL Query for SQL Server

Analyze and retrieve your data, build your queries visually, work with query plans, build charts based on retrieved data quickly and more.



#### Data Comparer for SQL Server

Compare and synchronize the contents of your databases. Automate your data migrations from development to production database.

Scroll to top

#### PostgreSQL

#### SQL Management Studio for PostgreSQL

EMS SQL Management Studio for PostgreSQL is a complete solution for database administration and development. SQL Studio unites the must-have tools in one powerful and easy-to-use environment that will make you more productive than ever before!

## 5

#### EMS SQL Backup for PostgreSQL

Creates backups for multiple PostgreSQL servers from a single console. You can use automatic backup tasks with advanced schedules and store them in local or remote folders or cloud storages

#### SQL Manager for PostgreSQL

Simplify and automate your database development process, design, explore and maintain existing databases, build compound SQL query statements, manage database user rights and manipulate data in different ways.



#### Data Export for PostgreSQL

Export your data to any of 20 most popular data formats, including MS Access, MS Excel, MS Word, PDF, HTML and more



#### Data Import for PostgreSQL

Import your data from MS Access, MS Excel and other popular formats to database tables via user-friendly wizard interface.



#### Data Pump for PostgreSQL

Migrate from most popular databases (MySQL, SQL Server, Oracle, DB2, InterBase/Firebird, etc.) to PostgreSQL.



#### Data Generator for PostgreSQL

Generate test data for database testing purposes in a simple and direct way. Wide range of data generation parameters.



#### DB Comparer for PostgreSQL

Compare and synchronize the structure of your databases. Move changes on your development database to production with ease.



#### DB Extract for PostgreSQL

Create database backups in the form of SQL scripts, save your database structure and table data as a whole or partially.

01

#### SQL Query for PostgreSQL

Analyze and retrieve your data, build your queries visually, work with query plans, build charts based on retrieved data quickly and more.



#### Data Comparer for PostgreSQL

Compare and synchronize the contents of your databases. Automate your data migrations from development to production database.

Scroll to top

#### InterBase / Firebird



#### SQL Management Studio for InterBase/Firebird

EMS SQL Management Studio for InterBase and Firebird is a complete solution for database administration and development. SQL Studio unites the must-have tools in one powerful and easy-to-use environment that will make you more productive than ever before!

#### SQL Manager for InterBase/Firebird

Simplify and automate your database development process, design, explore and maintain existing databases, build compound SQL query statements, manage database user rights and manipulate data in different ways.



#### Data Export for InterBase/Firebird

Export your data to any of 20 most popular data formats, including MS Access, MS Excel, MS Word, PDF, HTML and more



#### Data Import for InterBase/Firebird

Import your data from MS Access, MS Excel and other popular formats to database tables via user-friendly wizard interface.

#### Data Pump for InterBase/Firebird

Migrate from most popular databases (MySQL, SQL Server, Oracle, DB2, PostgreSQL, etc.) to InterBase/Firebird.

_	-	
	10	ы.
	<b>T</b>	
	_	
	_	

#### Data Generator for InterBase/Firebird

Generate test data for database testing purposes in a simple and direct way. Wide range of data generation parameters.



#### DB Comparer for InterBase/Firebird

Compare and synchronize the structure of your databases. Move changes on your development database to production with ease.



#### DB Extract for InterBase/Firebird

Create database backups in the form of SQL scripts, save your database structure and table data as a whole or partially.



#### SQL Query for InterBase/Firebird

Analyze and retrieve your data, build your queries visually, work with query plans, build charts based on retrieved data quickly and more.



#### Data Comparer for InterBase/Firebird

Compare and synchronize the contents of your databases. Automate your data migrations from development to production database.

Scroll to top

#### Oracle



#### SQL Management Studio for Oracle

EMS SQL Management Studio for Oracle is a complete solution for database administration and development. SQL Studio unites the must-have tools in one powerful and easy-to-use environment that will make you more productive than ever before!

#### SQL Manager for Oracle

Simplify and automate your database development process, design, explore and maintain existing databases, build compound SQL query statements, manage database user rights and manipulate data in different ways.



#### Data Export for Oracle

Export your data to any of 20 most popular data formats, including MS Access, MS Excel, MS Word, PDF, HTML and more.



#### Data Import for Oracle

Import your data from MS Access, MS Excel and other popular formats to database tables via

user-friendly wizard interface.



Data Pump for Oracle

Migrate from most popular databases (MySQL, PostgreSQL, MySQL, DB2, InterBase/Firebird, etc.) to Oracle



#### Data Generator for Oracle

Generate test data for database testing purposes in a simple and direct way. Wide range of data generation parameters.



#### DB Comparer for Oracle

Compare and synchronize the structure of your databases. Move changes on your development database to production with ease.



#### DB Extract for Oracle

Create database backups in the form of SQL scripts, save your database structure and table data as a whole or partially.



AR

#### SQL Query for Oracle

Analyze and retrieve your data, build your queries visually, work with query plans, build charts based on retrieved data quickly and more.

#### Data Comparer for Oracle

Compare and synchronize the contents of your databases. Automate your data migrations from development to production database.

Scroll to top

#### **IBM DB2**



#### SQL Manager for DB2

Simplify and automate your database development process, design, explore and maintain existing databases, build compound SQL query statements, manage database user rights and manipulate data in different ways.



#### Data Export for DB2

Export your data to any of 20 most popular data formats, including MS Access, MS Excel, MS Word, PDF, HTML and more.



#### Data Import for DB2

Import your data from MS Access, MS Excel and other popular formats to database tables via user-friendly wizard interface.

#### Data Pump for DB2

Migrate from most popular databases (MySQL, PostgreSQL, Oracle, MySQL, InterBase/Firebird, etc.) to DB2

#### Ŧ4

Data Generator for DB2

Generate test data for database testing purposes in a simple and direct way. Wide range of data generation parameters.



#### **DB Extract for DB2**

Create database backups in the form of SQL scripts, save your database structure and table data as a whole or partially.



#### SQL Query for DB2

Analyze and retrieve your data, build your queries visually, work with query plans, build charts

based on retrieved data quickly and more.

Scroll to top

#### **Tools & components**



#### Advanced Data Export for RAD Studio VCL

Advanced Data Export for RAD Studio VCL allows you to save your data in the most popular office programs formats.



#### Advanced Data Export .NET

Advanced Data Export .NET is a component for Microsoft Visual Studio .NET that will allow you to save your data in the most popular data formats for the future viewing, modification, printing or web publication. You can export data into MS Access, MS Excel, MS Word (RTF), PDF, TXT, DBF, CSV and more! There will be no need to waste your time on tiresome data conversion - Advanced Data Export will do the task quickly and will give the result in the desired format.



#### Advanced Data Import for RAD Studio VCL

Advanced Data Import for RAD Studio VCL will allow you to import your data to the database from files in the most popular data formats.

6	7	ì
	X	ļ
•	-	

#### Advanced PDF Generator for RAD Studio

Advanced PDF Generator for RAD Studio gives you an opportunity to create PDF documents with your applications written on Delphi or C++ Builder.



#### Advanced Query Builder for RAD Studio VCL

Advanced Query Builder for RAD Studio VCL is a powerful component for Delphi and C++ Builder intended for visual building SQL statements for the SELECT, INSERT, UPDATE and DELETE clauses.



#### Advanced Excel Report for RAD Studio

Advanced Excel Report for RAD Studio is a powerful band-oriented generator of template-based reports in MS Excel.



#### Advanced Localizer for RAD Studio VCL

Advanced Localizer for RAD Studio VCL is an indispensable component for Delphi for adding multilingual support to your applications.

Scroll to top



## 2 Getting Started

**SQL Query for SQL Server** gives you an opportunity to contribute to efficient SQL Server administration and development by building SQL queries easily and quickly. The succeeding chapters of this document are intended to inform you about the tools implemented in the utility. Please see the instructions below to learn how to perform various operations in the easiest way.

- <u>First time started</u>
- Database navigation
- Working with queries
- Using context menus
- <u>Importing settings</u>
- <u>Selecting program language</u>

EMS SQL Query for SQL Server - AdventureW Database Edit View Query Options Databases MERLIN/SQL2008 AdventureWorks2008 on MERLIN/S dooM_SERVER/TSER/2005 DemoDB on dooM_SERVER/TSER/ LargeDB on dooM_SERVER/TSER/	orks on dooM_SERVER\TSERV2005 [AdventureWorks] - [[AdventureWorks on dooM_SERVER\T
	CountryRegionCode     South StateProvinceFlag     Name     CountryRegionCode     Name     CountryRegionCode     Name     ModifiedDate     ModifiedDate     III     Criteria Selection Grouping criteria Sorting     All of the following are met     1. Person.CountryRegionCode     IS NOT NULL
AdventureWorks on dooM_SERVER\TSERV	Data         Results         Image: Market of the state of the st
CountryReg       nvarchar(3)       ISO standard cc         Name       dbo.Name       Country or regic         ModifiedDat       datetime       Date and time th	50         NSW         AU         New South Wales         9 {9910L           <

#### Enjoy your work with SQL Query for SQL Server!

### See also: EMS SQL Query Tools Personalization

24	SQL Query for SQL Server - User's Manual

## 2.1 First time started

25

This is how **SQL Query for SQL Server** looks when you start it for the first time.

The main menu allows you to perform various **Database** operations, **Edit** your queries effectively, activate/deactivate <u>Database Explorer</u>, <u>SQL Assistant</u> and toolbars for <u>Database operations</u>, <u>Options</u>, <u>Query management tools</u>, etc. within the **View** menu, manage your SQL queries using items of the **Query** menu, <u>customize</u> the application using the **Options** menu, manage SQL Query **Windows**, access <u>Registration</u> information and product documentation using the corresponding items available within the **Help** menu.

To start working with your SQL Server you should first register the host using <u>Register</u> <u>Host Wizard</u>. After that you need to register one or several databases using <u>Register</u> <u>Database Wizard</u>.

By default the corresponding **G** Register Host, **G** Register Database buttons are available on the toolbar and within the Database menu.



When the database connection settings are specified, you can set connection to your database and proceed to <u>Database navigation</u> and <u>working with SQL queries</u>.

#### See also:

<u>Using context menus</u> <u>Selecting program language</u> <u>Importing settings</u>

26	SQL Query for SQL Server - User's Manual
-	

## 2.2 Database navigation

27

After you have registered the required database(s) the corresponding node(s) appear in the <u>DB Explorer</u> tree on the left. If the **Show Hosts** option is checked on the <u>Environment</u> <u>Options | DB Explorer</u> page, the host nodes are also displayed in the tree (alternatively, you can use the **Show Hosts** item of the <u>Database context menu</u> for the same purpose).

😥 EMS SQL Query for SQL Server - AdventureWo	rks on dooM_SERVER\TSERV2005 [AdventureWorks]
Database Edit View Query Options Wir	idows <u>H</u> elp
	N N / 2 2 3 3 4 9 2 5 3 5 5 5 5 6 7 6 7 7
🕒 Databases 🕶 🧭 🕶 🎧 🖛 🔂 🕈 🎒	<u>}</u> ■   ▶ ◇ 増   ✓ X   <b>■</b>   <b>≥</b> ₩ <b>● ● ■</b>
Databases	
dooM_SERVER\TSERV2005	
DemoDB on dooM_SERVER\TSERV2	
AdventureWorks on dooM_SER	
🕀 🤠 dbo	
HR III	
HumanResources	
Person	
Tables (7)	
Address (Person)	
AddressType (Person)	
Contact (Person)	
ContactType (Person)	
CountryCapital (Person)	
CountryRegion (Person)	
StateProvince (Person)	
AdventureWorks on dooM SERVER\TSERV2	
Schemas	
dbo	
HR E	
HumanResources	
Person	
Production	
TE Durchasing	

To <u>connect</u> to a database, simply double-click its node (or select the database node in <u>DB</u> <u>Explorer</u> and press **Enter**). If the connection is successful, the database node expands into a tree of objects. Now you can navigate within the database objects and queries. Use <u>SQL Assistant</u> to get extended information about the currently selected object.

### See also: Working with queries

Using context menus Selecting program language Importing settings

## 2.3 Working with queries

29

Nodes of the <u>DB Explorer</u> tree allow you to access the corresponding objects of the database. Double-click an object (or select its node in <u>DB Explorer</u> and press **Enter**) to create a <u>query</u> for it. Right-click an object to display the <u>context menu</u> which allows you to perform various operations over the selected object or over the entire database.

😥 EMS SQL Query for SQL Server - AdventureWorks on dooM_SERVER\TSERV2005 [AdventureWorks] - [[AdventureWorks on dooM_SERVER\T 👝 💷 📧		
🔛 Database Edit View Query Options Windows Help 🗕 🗗 🗙		
Frit Builder History Favoritae		
Databases Luit and Instory Lavoitos		
MERLIN/SQL2008     Select     Select		
Adventureworkszulie of MERLINIS     Query 1     Query 1     Query 1		
DemoDB on dooM_SERVER\TSER\		
LargeDB on dooM_SERVER\TSER\		
AdventureWorks on dooM_SE		
B		
HumanResources     TerritoryID     Vance     Country YregionCode     TerritoryID		
Person		
Address (Person)		
AddressType (Person)		
Criteria Selection Grouping criteria Sorting		
Country/Capital (Person)		
CountryRegion (Person		
StateProvince (Person)		
table2 (Person)		
⊕ 🔏 Views (2)         Data		
Production Results		
AdventureWorks on dooM_SERVER\TSERV StatePr Str Cc Is( Name Territory rowgui		
Field     Field Comment     5 AS     AS     American Samoa     1 (255D)		
Image: CountryReg Invarchar(3)         ISO standard cc         50         NSW         AU         Image: New South Wales         9         (9910)         +		
Image: Mane   Image: dbo.Name   Country or regio		
ModifiedDat   datetime   Date and time th Grid View   Form View Diagram View		
Records fetched: 181/181 Read C		

#### See also:

Database navigation Using context menus Selecting program language Importing settings

## 2.4 Using context menus

30

The **context menus** are aimed at facilitating your work with SQL Query for SQL Server: you can perform a variety of operations using context menu items.

Select an object in <u>DB Explorer</u> and right-click its node to open the context menu.

Host context menu Database context menu Query context menu

#### See also:

Database navigation Working with queries Selecting program language Importing settings

#### 2.4.1 Host context menu

The **context menu of a registered host** in the <u>DB Explorer</u> tree allows you to:

- register a new database using Register Database Wizard;
- register a new host using Register Host Wizard;
- unregister the host;
- search for an object within the tree;
- configure objects representation in **Database Explorer**.

Databases			
🕀 🌄 MERLIN\SQL2008			
dooM_SERVER\TSE	RV2	005 (1)	
🗄 🥃 localhost	X	Connect to Database	Shift+Ctrl+C
E Scalhost\sqlexpres	R <sub>a</sub>	Disconnect from Database	Shift+Ctrl+D
	6	Database Registration Info	
	8	Register Database	Shift+Alt+R
	6	Unregister Database	Shift+Alt+U
	2	Refresh	F5
	Q.	Register Host	Shift+Ctrl+R
	Ģ	Unregister Host	Shift+Ctrl+U
	8	Find Object	Ctrl+F
		Sort by Aliases	
	<b>~</b>	Show Hosts	

### See also: Database context menu Query context menu

### 2.4.2 Database context menu

The **context menu of a registered database** in the <u>DB Explorer</u> tree allows you to:

- connect to the selected database (if connection to the database is not active yet);
- disconnect from the selected database (if connection to the database has been already activated);
- register a new database using <u>Register Database Wizard;</u>
- unregister the selected database;
- register a new host using <u>Register Host Wizard;</u>
- view/edit the selected database registration information within the <u>Database</u> <u>Registration Info</u> dialog;
- search for an object within the tree;
- configure objects representation in <u>Database Explorer;</u>
- reopen one of recently saved <u>queries</u> from file.



#### See also:

Query context menu Host context menu

#### 2.4.3 Query context menu

32

The **context menu of a query** in the <u>DB Explorer</u> tree allows you to perform various common operations:

for queries within the **Query History** node:

- activate the selected query, i.e. open it in SQL Editor;
- view the text of the query;
- clear history;

Databases				
🗄 💭 MERLIN\SQL2008				
dooM_SERVER\TSERV20	05			
BemoDB on dooM_SE	RVER	R\TSERV2005		
🖃 📒 AdventureWorks or	1 do	oM_SERVER\TSI	ERV2005	
🕀 🛄 dbo				
🕀 🛄 HR				
🖃 🛄 HumanResources				
🗄 🧰 Tables (10)				
🗄 🚹 Views (6)				
🕀 🛄 Person				
Production				
🕀 🛄 Purchasing				
🕀 🔛 Sales				
🖻 法 Favorite Querie	s (1)	)		
Countries				
🖻 🙍 Query History		Activate Query	Ctrl+Alt+A	
Employees_ad		View Query Text	Ctrl+Alt+V	
Employee revi-				
Countries		Rename Query	Ctrl+Alt+R	
Countries		Delete Query	Ctrl+Alt+D	
AdventureWol		Delete All Queries		
	-			
Iocalhost\sqlexpress				

#### for Favorite Queries:

- activate the selected query, i.e. open it in <u>SQL Editor;</u>
- view the text of the query;
- rename the query;
- delete the query;
- delete all the queries within the node.

#### See also:

Database context menu Host context menu

33	SQL Query for SQL Server - User's Manual

## 2.5 Importing settings

When your copy of SQL Query is launched for the first time, the application checks whether **SQL Manager for SQL Server** is installed on the machine and prompts you to import SQL Manager database repository into SQL Query for SQL Server as well.

Question		×
?	SQL Query for PostgreSQL has detected that SQL Manager for PostgreSQL is installed on your computer. Do you wish to import the respective settings from SQL Manager for SQL Server?	
	<u>Y</u> es <u>N</u> o	

If necessary, you can also import some of SQL Manager settings to your SQL Query for SQL Server. The **Import settings from SQL Manager** dialog allows you to specify groups of settings to be applied for your copy of SQL Query.

Import settings from SQL Manager fo	or SQL Server
<ul> <li>Import editor settings</li> <li>Import visual schemes</li> </ul>	<ul> <li>Import grid settings</li> <li>Import editor templates</li> </ul>
Import font settings	Import registered databases
	<u>O</u> K <u>C</u> ancel

To open this dialog, select the **Options | Import settings from SQL Manager...** main menu item.

See also:
Database navigation
Working with queries
Using context menus
Selecting program language

## 2.6 Selecting program language

35

The **Select Language** dialog allows you to select one of the available interface localizations to be applied for SQL Query for SQL Server.

Select Language	×
Default - no localization (English)	
English	
French	
German	
Russian	
OK Cancel Hel	p

To open this dialog, use the **Options | Select Language** main menu item.

The window contains the list of available languages according to the directory specified within the <u>Localization</u> section of the <u>Environment Options</u> dialog.

#### See also:

Database navigation Working with queries Using context menus Importing settings


# 3 EMS SQL Query Tools

**SQL Query for SQL Server** provides you with a number of GUI tools for efficient working with your SQL Server databases.

Please see the chapters below to learn how to use SQL Query tools effectively.

Database Explorer Database management tools Query management tools Data management tools

See also: Getting Started Personalization

## 3.1 Database Explorer

38

**Database Explorer** (or **DB Explorer**) is the basic window of SQL Query for SQL Server for navigation within databases and working with queries. The tree-like structure of DB Explorer allows you to manage the databases, database objects and your SQL queries quickly and easily.



The following list contains the most frequently used features provided by Database Explorer.

<u>Managing database registration info</u> <u>Connecting to databases</u> <u>Viewing brief DB info</u> <u>Viewing query history</u> <u>SQL Assistant</u> To view/hide the Database Explorer window, use the **View | DB Explorer** main menu item or press the **F11** key.

See also: Database management tools Query management tools Data management tools

## 3.1.1 Managing database registration info

After you have registered your database in SQL Query for SQL Server, you can perform a number of operations with the database using the <u>context menu</u>.



If you need to view and/or edit the registration information of a database, right-click the database node in DB Explorer and select the **Database Registration Info...** context menu item to open the <u>Database Registration Info</u> dialog.

### See also: Connecting to databases

<u>Viewing brief DB info</u> <u>Viewing query history</u> <u>SQL Assistant</u>

### 3.1.2 Connecting to databases

When the host is <u>registered</u>, and the <u>database registration</u> is complete, you can establish connection to your database.

Databases				
🕀 😓 MERLIN\SQL2008				
	V200	5		
DemoDB on dooM	SER	VER\TSERV2005		
🗄 📒 AdventureWork	X	Connect to Database	Shift+Ctrl+C	
🗄 🥃 localhost	2	Disconnect from Databas	e Shift+Ctrl+D	
	8	Database Registration Int	fo	
	<mark>.</mark>	Register Database	Shift+Alt+R	
	₽.	Unregister Database	Shift+Alt+U	
	2	Refresh	F5	
	Q.	Register Host	Shift+Ctrl+R	
	Ģ	Unregister Host	Shift+Ctrl+U	
	8	Find Object	Ctrl+F	
		Sort by Aliases		
	~	Show Hosts		
		Reopen Query File		۲

The simplest way to connect to a database is to double-click its node in the <u>Database</u> <u>Explorer</u> tree. The same operation can be performed by selecting the **Connect to Database** item of the database node context menu, or by using the **Database** | **Connect to Database** main menu item.

Alternatively, you can use the *Shift+Ctrl+C* shortcut to connect to your database.

## See also: Managing database registration info Viewing brief DB info Viewing query history SQL Assistant

## 3.1.3 Viewing brief DB info

<u>Database Explorer</u> allows you to view brief registration info of your database quickly without using the database <u>context menu</u>.

Databases	
🕀 🥃 MERLIN\SQL2008	
dooM_SERVER\TSERV200	05
DemoDB on dooM_SEF	RVER\TSERV2005
AdventureWorks or	1 dooM_SERVER\TS
dbo	
HR HR	Alias: AdventureWorks on dooM_SERVER\TSERV2005
HumanResources	Database Name: AdventureWorks
Person	Host: dooM_SERVER\TSERV2005
	SQL authentication
	Font charset: DEFAULT_CHARSET
	Server version: Microsoft SQL Server 9.00.5057.00
	e (1)
	5(1)
	5)
E localhost/sqlexpress	
AdventureWorks on dooM_SE	RVER\TSERV2005
Schemas	
Person	
Production	
Purchasing	
🔛 Sales	-

If you have several registered databases, and if there is no necessity to open the <u>Database Registration Info</u> dialog, you can select a database alias in DB Explorer and hold the cursor for a while - in this case the ToolTip containing the **database registration settings** popups after a short delay.

# See also: Managing database registration info

<u>Connecting to databases</u> <u>Viewing query history</u> <u>SQL Assistant</u>

## 3.1.4 Viewing query history

Use the **Query History** node in <u>Database Explorer</u> to access the list of recently executed queries. This list contains queries within the currently selected database. Each of the registered databases has its own **Query History** list.

MERLIN/SQL2008 dooM_SERVER/TSERV2005 DemoDB on dooM_SERVER/TSERV2005 AdventureWorks on dooM_SERVER/TSERV2005 doo HR HR HumanResources Person Production Production Sales Favorite Queries (1) Query History (6) Countries
<ul> <li>dooM_SERVER\TSERV2005</li> <li>DemoDB on dooM_SERVER\TSERV2005</li> <li>AdventureWorks on dooM_SERVER\TSERV2005</li> <li>dbo</li> <lidbo< li=""> <li>dbo</li> <lidbo< li<="" th=""></lidbo<></lidbo<></ul>
DemoDB on dooM_SERVER\TSERV2005 AdventureWorks on dooM_SERVER\TSERV2005 I I doo I I doo I I HR I I HR I I HumanResources I I Person I I Production I I Production I I Purchasing I I Sales I I Avorite Queries (1) I Query History (6) Countries
AdventureWorks on dooM_SERVER\TSERV2005  AdventureWorks on dooM_SERVER\TSERVER\TSERV2005  AdventureWorks on dooM_SERVE
<ul> <li>i dbo</li> <li>i dbo</li></ul>
<ul> <li>HR</li> <li>HumanResources</li> <li>Person</li> <li>Production</li> <li>Purchasing</li> <li>Sales</li> <li>Sales</li> <li>Favorite Queries (1)</li> <li>Query History (6)</li> <li>Countries</li> </ul>
<ul> <li>HumanResources</li> <li>Person</li> <li>Production</li> <li>Purchasing</li> <li>Sales</li> <li>Favorite Queries (1)</li> <li>Query History (6)</li> <li>Countries</li> </ul>
<ul> <li>Person</li> <li>Production</li> <li>Purchasing</li> <li>Sales</li> <li>Favorite Queries (1)</li> <li>Query History (6)</li> <li>Countries</li> </ul>
Production     Purchasing     Sales     Favorite Queries (1)     Query History (6)     Countries
<ul> <li>Purchasing</li> <li>Sales</li> <li>Favorite Queries (1)</li> <li>Query History (6)</li> <li>Countries</li> </ul>
Image: Head Structure       Image: Head Structure
Favorite Queries (1)     Query History (6)     Countries
Query History (6)
Countries
Employees_addresses
Employee reviev SELECT
Countries Person.StateProvince.StateProvinceD,
Countries Person.StateProvince.CountryRegionCode,
AdventureWork: Person.StateProvince.IsOnlyStateProvinceFlag,
Iocalhost     Person CountryBegion CountryBegionCode
FROM
Person.StateProvince
INNEK JUIN Person. Country Region ON (Person. StateProvince. Country Region Code =
Person.CountryRegion.CountryRegionCode)
WHERE
Person.CountryRegion.CountryRegionCode IS NOT NULL

Double-click a query to open it in <u>SQL Editor</u>.

If you have many queries in the **Query History** list, and you need to browse them quickly, you can select each query in DB Explorer and hold the cursor for a while - in this case the ToolTip containing the **text of the query** popups after a short delay.

For your convenience the **Favorite Queries** list is implemented in SQL Query for SQL Server. This list is available within the **Favorite Queries** node of <u>Database Explorer</u> and allows you to store the most frequently used SQL queries in one location.

To add a query to the **Favorite Queries** list, use the Add Query to Favorites toolbar button in <u>SQL Editor</u> or <u>Visual Query Builder</u>.

### See also:

Managing database registration info Connecting to databases Viewing brief DB info SQL Assistant

### 3.1.5 SQL Assistant

**SQL Assistant** which is located at the bottom of the <u>Database Explorer</u> window helps you to work with your database objects. Depending on the current selection in DB Explorer, the SQL Assistant area displays additional information about the selected object.

Adv	ventureWorks	on dooM_SERV	/ER\TSERV2005\Person\Tables\Co	onta
Fie	ld	Field Type	Field Comment	*
	ContactID	int	Primary key for Contact records.	
	NameStyle	dbo.NameStyle	0 = The data in FirstName and LastNam	
	Title	nvarchar(8)	A courtesy title. For example, Mr. or Ms	=
	FirstName	dbo.Name	First name of the person.	
	MiddleName	dbo.Name	Middle name or middle initial of the perso	
	LastName	dbo.Name	Last name of the person.	
	Suffix	nvarchar(10)	Surname suffix. For example, Sr. or Jr.	
	EmailAddress	nvarchar(50)	E-mail address for the person.	
	EmailPromotior	int	0 = Contact does not wish to receive e-r	
	Phone	dbo.Phone	Phone number associated with the pers-	Ŧ

If you select a **host** in DB Explorer, SQL Assistant displays the list of the *registered databases*. The databases you are connected to are displayed in color, whereas all the rest database aliases are grayed out.

If you select a **database** in DB Explorer, SQL Assistant displays the list of the database *schemas*.

If you select a **schema** in DB Explorer, SQL Assistant displays the list of the database *object groups* and *the number of objects* in each group.

Selecting an **object group** in the DB Explorer displays the list of the *objects* in SQL Assistant.

If you select a **table** or a **view** in DB Explorer, SQL Assistant displays the list of the *fields*, their *types* and *field comments*.

If you select a **query** in DB Explorer, SQL Assistant displays the date and the time when the query was created.

You can also use **SQL Assistant** to work with your queries quickly. You can drag-anddrop object aliases to the <u>SQL Editor</u> or <u>Visual Query Builder</u> working area, in the same way as this operation is performed in <u>Database Explorer</u>.

#### See also:

Managing database registration info Connecting to databases Viewing brief DB info Viewing query history

## 3.2 Database management tools

**SQL Query for SQL Server** provides a number of tools you may need to manage your SQL Server databases. Find the list of common database management operations for working in SQL Query below.

### **Registering Hosts**

45

- select the Database | Register Host... main menu item or use the corresponding toolbar button;
- set all the necessary options using <u>Register Host Wizard</u> which guides you through the whole process of Host registration.

### **Registering Databases**

In order to register a single database in SQL Query for SQL Server:

- select the Database | Register Database... main menu item or use the corresponding toolbar button;
- check the **Register a single database** option and set all the necessary options using <u>Register Database Wizard</u> which guides you through the whole process of Database registration.

In order to register several databases at one host:

- select the Database | Register Database... main menu item or use the corresponding toolbar button;
- deselect the **Register a single database** option and set all the necessary options using <u>Register Database Wizard</u> which guides you through the whole process of Database registration.

### **Unregistering Databases**

In order to unregister a single database in SQL Query for SQL Server:

- select the database to unregister in the <u>DB Explorer</u> tree;
- select the **Database | Unregister Database** main menu item or use the corresponding botton;
- confirm unregistering in the corresponding dialog window.

In order to unregister a host and all databases at the host:

- select the host to unregister in the <u>DB Explorer</u> tree;
- select the Database | Unregister Host main menu item or use the corresponding button;
- confirm unregistering in the corresponding dialog window.

### **Connecting to Databases**

In order to connect to a database in SQL Query for SQL Server:

- select the database to connect to in the <u>DB Explorer</u> tree;
- double-click its alias

or

 select the Database | Connect to Database main menu item or use the corresponding X toolbar button

or

• right-click its alias and select the **Connect to Database** context menu item.

### **Disconnecting from Databases**

In order to disconnect from a database in SQL Query for SQL Server:

- select the alias of the database to disconnect from or any of its objects in the <u>DB</u> <u>Explorer</u> tree;
- select the Database | Disconnect from Database main menu item or use the corresponding <sup>b</sup> toolbar button

or

• right-click its alias or any of its objects and select the **Disconnect from Database** context menu item.

### See also:

Database Explorer Query management tools Data management tools

## 3.2.1 Register Host Wizard

47

**Register Host Wizard** allows you to register the host and several databases at one host.



To open the wizard, select the **Database | Register Host...** main menu item, or use the **Register Host** button on the main toolbar. You can also use the *Shift+Ctrl+R* shortcut for the same purpose.

- Setting connection properties
- <u>Setting registration options</u>

### See also:

Register Database Wizard Database Registration Info dialog

### **Setting connection properties**

Enter the necessary settings to establish connection to SQL Server.

Registe	er Host Wizard		
Re	gister Host		
	Specify the connection p	arameters	
		Welcome to the This wizard allo only once, givin This wizard will selecting databa	Register Database Wizard! ws you to set the connection parameters for the selected databases g you the possibility to connect them quickly afterwards. guide you through the process of setting the connection parameters, ases, and customizing their specific options.
	SQL Query for SQL Server	Host name SQL Serve User name Pa <u>s</u> sword	dooM_SERVER\TSERV2005       r Authentication       Screens
		Register a <u>s</u>	single database Advanced
Ŀ	Help		< <u>B</u> ack <u>N</u> ext > Cancel

#### Host name

Type in, or use the drop-down list to specify the host name of the SQL Server server.

Please note that if SQL Server is installed as a named instance, you should enter the name of your machine and the instance name in the **Host name** field in the following format: computer\_name\sqlserver\_instance\_name (e.g. "MYCOMPUTER\SQLEXPRESS").

#### **Authentication Type**

Specify the type of the database server authentication to be used for the connection: *SQL Server Authentication* or *Windows Authentication*. It is strongly recommended to avoid using SQL Server authentication with "sa" as the login.

Afterwards you should specify **authorization** settings: **User name** and **Password**.

Click the **Advanced** button to view/edit additional parameters for connection using **SQL Server Client Network Utility**.

### Register a single database

Check this option if you wish to register one database at the host.

If the **Register a single database** option has been unchecked, you should also specify the databases you wish to be registered at the host. To select a database, you need to

move it from the **Available databases** list to the **Selected databases** list. Use the

 ${igsimus}$  buttons or drag-and-drop operations to move the databases from one list to

another.

Register Host Wizard			<b>×</b>
Register Host			
Select databases to regist	er		
SQL SQL Server	Available databases master model msdb tempdb TEST xtraLargeDB		Selected databases AdventureWorks DemoDB LargeDB
Help		< <u>B</u> ack	Cancel

Click the **Next** button to proceed to the <u>Setting registration options</u> step of the wizard.

## **Setting registration options**

Select a **database** from the list of selected databases and specify its **alias**. Repeat the operation and set the options below for each of the databases being registered at the host.

If necessary, select the **client charset** for the database.

Regist	ter Host Wizard			×
Re	egister Host			
	Set some specific options	for registered database(	s) and click the Finish button	
		Database <u>n</u> ame	AdventureWorks	-
		Database <u>a</u> lias	AdventureWorks on dooM_SERVER\TSERV2005	
		Client charset	ANSI_CHARSET	•
	SQL Query	Login prompt befo	re connection Autoconnect on startup Editor gueries Show system objects	
	for SQL Server	Log file		
	Help		< <u>B</u> ack <u>F</u> inish Cano	zel

#### Login prompt before connection

Check this option if you wish to be prompted for authorization information (*User name* and *Password*) each time you connect to the database.

#### Show system objects

If this option is checked, system objects of the database are displayed in <u>DB Explorer</u>.

#### Autoconnect at startup

Setting this option enables connection to the database automatically when the application is started.

#### Enable log of SQL Editor queries

Use this option to enable/disable SQL queries log.

### Log file

This field is enabled if the **Enable log of SQL Editor queries** option is selected. Here you can specify the path to the \*.*sql* file where SQL queries are logged.

If necessary, you can return to any of the previous steps using the **Back** button and make the appropriate changes for the currently registered SQL Server host.

Click the **Finish** button to complete the Host registration process and start working with the newly registered host and database(s) in SQL Query for SQL Server.

## 3.2.2 Register Database Wizard

51

Register Database Wizard allows you to register one or several databases at one host.

To open the wizard, select the **Database | Register Database...** main menu item, or use the **Register Database** button on the main toolbar. You can also use the *Shift+Alt+R* shortcut for the same purpose.

- <u>Setting connection properties</u>
- <u>Setting registration options</u>



#### See also:

Database Registration Info dialog Register Host Wizard

### **Setting connection properties**

Enter the necessary settings to establish connection to SQL Server.

Register Database Wizard	
Register Database	
Specify the connection pa	arameters
	Welcome to the Register Database Wizard! This wizard allows you to set the connection parameters for the selected databases only once, giving you the possibility to connect them quickly afterwards. This wizard will guide you through the process of setting the connection parameters, selecting databases, and customizing their specific options.
SQL Query for SQL Server	Host name       dooM_SERVER\TSERV2005         Image: SQL Server Authentication       Image: Windows Authentication         User name       screens         Password       *******
	Register a single database Advanced
Help	< <u>B</u> ack <u>N</u> ext > Cancel

#### Host name

Type in, or use the drop-down list to specify the host name of the SQL Server server.

Please note that if SQL Server is installed as a named instance, you should enter the name of your machine and the instance name in the **Host name** field in the following format: computer\_name\sqlserver\_instance\_name (e.g. "MYCOMPUTER\SQLEXPRESS").

### Authentication Type

Specify the type of the database server authentication to be used for the connection: *SQL Server Authentication* or *Windows Authentication*. It is strongly recommended to avoid using SQL Server authentication with "sa" as the login.

Afterwards you should specify authorization settings: **User name** and **Password**.

Нажмите кнопку **Advanced**, чтобы просмотреть или отредактировать дополнительные параметры подключения с помощью SQL Server Client Network Utility.

#### Register a single database

Check this option if you wish to register one database or leave it unchecked if you wish to register several databases at the host.

Click the **Next** button to proceed to the <u>Setting registration options</u> step of the wizard.

### Setting registration options

Select the **database name** from the corresponding drop-down list and specify its **alias**.

If necessary, select the **Client charset**.

Registe	r Database Wizard			×
Reg	ister Database			
9	Set some specific options	for registered database(	s) and click the Finish button	
		Database <u>n</u> ame	AdventureWorks	•
		Database <u>a</u> lias	AdventureWorks on dooM_SERVER\TSERV2005	
		Client charset	ANSI_CHARSET	-
	SQL	Login prompt befo	re connection Autoconnect on startup	
	Query	Enable log of SQL	Editor gueries Show system objects	
	for SOL Server	Log file		
	OQL Gerver			
Ш	elp		< Back Einish Canc	el

#### Login prompt before connection

Check this option if you wish to be prompted for authorization information (*User name* and *Password*) each time you connect to the database.

#### Show all system objects

If this option is checked, system objects of the database are displayed in <u>DB Explorer</u>.

### Autoconnect on startup

Setting this option enables connection to the database automatically when the application is started.

### Enable log of SQL Editor queries

Use this option to enable/disable SQL queries log.

#### Log file

This field is enabled if the **Enable log of SQL Editor queries** option is selected. Here you can specify the path to the \*.*sql* file where SQL queries are logged.

If necessary, you can return to any of the previous steps using the **Back** button and

make the appropriate changes for the currently registered SQL Server database.

When done, click the **Finish** button to complete the Database registration process and start working with the newly registered database in SQL Query for SQL Server.

### 3.2.3 Database Registration Info dialog

Use the **Database Registration Info** dialog to view and/or edit the properties of the registered database which have been set on its creation.



To open the dialog, select the database in the <u>DB Explorer</u> tree, then right-click its alias and select the **Database Registration Info...** context menu item, or use the **Database | Database Registration Info...** main menu item. You can also use the **Database Registration Info** button on the main toolbar for the same purpose.

Editing connection properties Setting database options Setting log options

## See also:

Register Database Wizard Register Host Wizard

### Editing connection properties

The **Connection** section of the **Database Registration Info** dialog allows you to view and edit the connection properties.

55

Database Registration Info			×
	Connection		
Coptions	<u>H</u> ost name SQL Server Au User name Pa <u>s</u> sword	dooM_SERVER\TSERV2005 uthentication Screens ****** Advanced	
	Database name Database <u>a</u> lias <u>F</u> ont charset	AdventureWorks AdventureWorks on dooM_SERVER\TSER\/2005 DEFAULT_CHARSET	
Test Connect C	opy Alias from	OK <u>C</u> ancel <u>H</u> elp	

#### Host name

Type in, or use the drop-down list to specify the host name of the SQL Server server.

Please note that if SQL Server is installed as a named instance, you should enter the name of your machine and the instance name in the **Host name** field in the following format: computer\_name\sqlserver\_instance\_name (e.g. "MYCOMPUTER\SQLEXPRESS").

### **Authentication Type**

Specify the type of the database server authentication to be used for the connection: **SQL Server Authentication** or **Windows Authentication**. It is strongly recommended to avoid using SQL Server authentication with "sa" as the login.

Authorization settings: **User name** and **Password**.

If necessary, you can also select a different **Database name** or edit the **Database alias** - an optional name to display the database in the <u>DB Explorer</u> tree and all SQL Query tools.

This section of the **Database Registration Info** dialog also allows you to modify the **Font Charset** for the SQL Server database.

See also: Setting database options Setting log options

### Setting database options

The **Options** section of the **Database Registration Info** dialog allows you to set various options for the database.

Database Registration Info		×
Connection	Options	
Options		
Eogs	Login prompt before connection	
	Autoconnect at startup (if enabled in Environment Options)	
	Show system objects	
Test Connect C	opy Alias from	þ

Customize database options according to your needs. The detailed description is given below.

### **I** Login prompt before connection

Enables SQL Query for SQL Server to prompt for user name and password each time you connect to the database.

### Autoconnect at startup

Check this option to specify that SQL Query for SQL Server automatically establishes connection to the registered database at application startup.

#### Show system objects

This option determines whether SQL Server system objects are displayed in the  $\underline{DB}$  <u>Explorer</u> tree.

See also: Editing connection properties Setting log options

## **Setting log options**

The **Logs** section of the **Database Registration Info** dialog allows you to set SQL Query logging parameters.

Database Registration Info		×
Connection Options Logs	Logs SQL Editor ♥ Enable log of SQL Editor gueries SQL Editor log file C:\EMS\log.sql	
Test Connect C	opy Alias from	p

### **SQL Editor**

### **Enable log of SQL Editor queries**

Check this option if you wish to log your SQL queries in a file.

### SQL Editor log file

This field is enabled if the **Enable log of SQL Editor queries** option is selected. Here you can specify the path to the *\*.sql* file to store the logs of SQL queries.

### See also:

Editing connection properties Setting database options

## 3.3 Query management tools

When using **SQL Query for SQL Server**, you are provided with two basic tools you may need to manage your SQL queries: <u>SQL Editor</u> for editing SQL query text directly and <u>Visual Query Builder</u> for building queries visually. Find the list of common SQL query management operations below.

### **Creating new queries**

In order to create a new query in SQL Query for SQL Server:

- select the Query | New Query main menu item or use the corresponding k toolbar button;
- specify a name for the new query within the New Query dialog;

- proceed to the  $\ensuremath{\textit{Edit}}$  tab and use  $\ensuremath{\underline{\mathsf{SQL}}}\xspace$  Editor to edit the SQL query text or

• proceed to the **Builder** tab and use <u>Visual Query Builder</u> to build the SQL query visually.

### **Editing queries**

In order to open a query in SQL Query for SQL Server:

- select the query in the <u>DB Explorer</u> tree;
- right-click the query and select the Activate Query context menu item or
- double-click the query in the <u>DB Explorer</u> tree.

In order to load a query from an \*.sql file:

- select the Query | Load... main menu item or use the corresponding <sup>▶</sup> toolbar button;
- specify the query file within the **Load SQL File** dialog.

### **Executing queries**

In order to execute a query in SQL Query for SQL Server:

- create a new query or open an existing one;
- select the Query | Execute main menu item or use the corresponding ▶ toolbar button

or

• use the **F9** hot-key to execute the query.

### Saving queries

In order to save a query in SQL Query for SQL Server:

- create a new query or open an existing one;
- select the Query | Save... or the Query | Save as... main menu item

or

• use the Ctrl+S shortcut to save the query

or

• use the **Query | Save all queries** main menu item if you need to save all the queries at a time.

### See also:

<u>Database Explorer</u> <u>Database management tools</u> <u>Data management tools</u>

### 3.3.1 SQL Editor

**SQL Editor** is the basic SQL Query for SQL Server tool for creating and executing queries. The tool allows you to create and edit the SQL text of a query, prepare and execute queries and view the results of execution.

To open SQL Editor, select the **Query** | **New Query** main menu item, or use the  $\bowtie$  **New Query** button on the main toolbar. You can also use the Ctrl+N shortcut for the same purpose.



### See also: Visual Ouery Builder

### Working with SQL editor area

The **Editor area** of <u>SQL Editor</u> is available within the **Edit** tab and is provided for working with SQL queries in text mode.



For your convenience the **syntax highlight**, **code completion** and a number of other features are implemented. If necessary, you can enable/disable or customize most of SQL Editor features using the <u>Editor Options</u> dialog.

The example of code completion is illustrated in the picture below. You can set the delay within the <u>Quick code</u> section of the <u>Editor Options</u> dialog or manually activate the completion list by pressing the Ctrl+Space shortcut.

If necessary, you can **print** the SQL text of your query using the corresponding item of the <u>context menu</u> or the  $\Rightarrow$  **Print SQL** button on the main toolbar. You can also use the *Ctrl+P* shortcut for the same purpose.

### See also:

Using the context menu Find Text dialog Replace Text dialog Executing queries

### Using the context menu

The **context menu** of SQL Editor area contains most of the standard text-processing functions (*Cut, Copy, Paste, Select All*) and functions for working with the query as a whole, e.g. you can *move the cursor to a particular line, change the case* of selected text, view the query *properties* or *print* the text of the query. Each of these operations

K [AdventureWorks on dooM\_SERVER\TSERV2005] AdventureWorks on dooM\_SERVER\TSERV2005 5 Edit Builder History Favorites SELECT ٠ Person.StateProvince.StateProvinceID, Markers ۲ Person.StateProvince.StateProvinceCode, Person.StateProvince.CountryRegionCode, Toggle bookmarks ۶ Person.StateProvince.Name, E. Go to Line Number Person.CountryRegion.Name, Person.CountryRegion.CountryRegionCode Undo FROM Ξ 01 <u>R</u>edo Person.StateProvince INNER JOIN Person.CountryRegion ON (Per ountryRegionCode X Cut WHERE Copy Person.CountryRegion.CountryRegionCode Paste а Select All Find... Replace ... AOB. Search Next = Incremental Search Quick Code ۲ 

can be also performed with the corresponding hot keys used.

Implementation of the <u>Find Text</u> and the <u>Replace Text</u> dialogs contributes to more efficient work with the SQL code.

### See also:

Working with SQL Editor area Find Text dialog Replace Text dialog Executing queries

### **Find Text dialog**

The **Find Text** dialog is provided for quick and flexible searching for specified text within the <u>SQL Editor</u> working area.

#### Text to find

Enter a search string in this box. The Arrow-Down button which can be found next to the input box allows you to select any of the previously entered search strings.

### Options

#### Case Sensitive

This option can be used to differentiate uppercase characters from lowercase ones during

the search process.

### Whole words only

Use this option to search for words only (with this option off, the search string might be found within longer words.)

### **Regular Expressions**

Recognizes regular expressions in the search string.

Find Text	<b>X</b>		
Find			
Text to find Name	•		
Options	Direction		
Case sensitive	Forward		
Whole words only			
<u>R</u> egular expressions	Backward		
Scope	Origin		
Global     Glo	Erom cursor		
Selected text	Entire scope		
Mark search result with stack marker			
OK Show <u>All</u> Cancel <u>H</u> elp			

### Direction

#### Forward

Searches from the current position to the end of the <u>SQL Editor</u> area.

#### Backward

Searches from the current position to the beginning of the <u>SQL Editor</u> area.

### Scope

#### 🧕 Global

Searches within the entire <u>SQL Editor</u> working area, in the direction specified by the *Direction* setting.

#### Selected text

Searches only within the currently selected text, in the direction specified by the *Direction* setting. You can use the mouse or block commands to select a block of text.

#### Origin

### From cursor

The search starts at the cursor's current position, and then proceeds either forward to the end of the scope, or backward to the beginning of the scope depending on the *Direction* setting.

#### Entire scope

The search covers either the entire block of selected text or the entire script (no matter where the cursor is in the Editor area) depending upon the *Scope* options.

### See also:

Working with SQL Editor area Using the context menu Replace Text dialog Executing queries

### Replace Text dialog

The **Replace Text** dialog is provided for searching and replacing text within the <u>SQL Editor</u> working area.

### Text to find

Enter a search string in this box. The Arrow-Down button which can be found next to the input box allows you to select any of the previously entered search strings.

#### Text to replace

This box allows you to enter a string to replace the search string. The Arrow-Down button which can be found next to the input box allows you to select any of the previously entered strings. To replace the search string with an empty string, leave this input box blank.

### **Options**

### Case Sensitive

This option can be used to differentiate uppercase characters from lowercase ones during the search process.

#### Whole words only

Use this option to search for words only (with this option off, the search string might be found within longer words.)

#### Regular Expressions

Recognizes regular expressions in the search string.

#### **Replace with template**

This option requires the **Regular expressions** option selection.

Enable this option to use regular expressions in the **Text to replace** field. Expression used in this field will be applied to each string that matches the **Text to find** expression.

**Note:** The syntax of regular expressions that can be used in the Text to find and the Text to replace fields is similar to that used in Perl regular expressions. Comprehensive information about it can be found at <a href="http://perldoc.perl.org/perlre.html#Regular-Expressions">http://perldoc.perl.org/perlre.html#Regular-Expressions</a>.

### Prompt on replace

Check this option if you wish to be prompted before replacing upon each occurrence of the search string. When this option is off, the search string is replaced automatically.

Replace Text		(	×
Text to find	EMP		•
Text to <u>r</u> eplace	EMPLOYEE		•
Options		Direction	
Case sensitive		Eorward	
Regular expre	ssions h template lace	© <u>B</u> ackward	
Scope		Origin	
Observation (Observation) (		Erom cursor	
Selected text		─ Entire scope	
Mark search result with stack marker			
OK Replace <u>A</u> ll Cancel <u>H</u> elp			

### Direction

#### Forward

Searches and replaces from the current position to the end of the <u>SQL Editor</u> area.

#### Backward

Searches and replaces from the current position to the beginning of the <u>SQL Editor</u> area.

### Scope

#### Iobal

Searches and replaces within the entire <u>SQL Editor</u> working area, in the direction specified by the *Direction* setting.

#### Selected text

Searches and replaces only within the currently selected text, in the direction specified by the *Direction* setting. You can use the mouse or block commands to select a block of text.

#### Origin

#### From cursor

The search and replace process starts at the cursor's current position, and then proceeds either forward to the end of the scope, or backward to the beginning of the scope depending on the *Direction* setting.

#### Entire scope

The search and replace process covers either the entire block of selected text or the entire script (no matter where the cursor is in the Editor area) depending upon the *Scope* options.

Click the **Replace All** button to replace every occurrence of the search string. If you have checked the **Prompt on replace** option, the confirmation dialog box appears upon

each occurrence of the search string.

#### See also:

Working with SQL Editor area Using the context menu Find Text dialog Executing queries

## **Executing queries**

When all the query parameters are set, you can immediately **execute the query** in <u>SQL</u> <u>Editor</u>.

To execute a query, select the **Query | Execute** main menu item, or use the **Execute query** button on the main toolbar. You can also use the *F9* hot key for the same purpose.

🔛 [AdventureWorks on dooM_SERVER\TSERV2005] AdventureWorks on dooM_SERVER\TSERV2005 5 📃 🔳 📧			
Edit Builder History Favorites			
SELECT			
Person.StateProvince.StateProvinceID,			
Person.StateProvince.StateProvinceCode	<u>-</u> ,		
Person.StateProvince.CountryRegionCode	÷,		
Person.StateProvince.Name,	=		
Person.CountryRegion.Name,			
Person.CountryRegion.CountryRegionCode	<u>*</u>		
Porcon StateProvince			
TNNER JOIN Person CountryRegion ON (Pr	arson StateProvince.CountryRegion		
WHERE	ison.staterrovince.countrykegron		
Person.CountryRegion.CountryRegionCode	IS NOT NULL		
	-		
<	• • • • •		
Data			
Results			
StatePro Sta Co Name	Name_1		
1 AB CA Alberta	Canada		
2 AK US Alaska	United States 🗸		
· [			
Grid View Form View Diagram View			
Records fetched: 181/181 Read Onl			
Query OK, 181 rows affected (406 ms)			
53: 12 SQL Insert	Highlighting Unicode (UCS-2)		

If the SQL syntax is correct, the query is executed and, in case the query statement is supposed to return data (e.g. as SELECT statement), the **Results** area containing the returned data appears within the **Data** tab. The position of the tab depends on the **Query results on separate tab** option selection (see <u>Environment options | Preferences</u>). If SQL syntax of the query contains any errors, the query execution is stopped and the corresponding error message is displayed in the status bar area at the bottom of the editor window.

By default, data returned by a query are displayed as a grid (see <u>Data View</u> for details).

See also: Working with SQL Editor area Using the context menu Find Text dialog Replace Text dialog

### 3.3.2 Visual Query Builder

**Visual Query Builder** is implemented in SQL Query for SQL Server for building queries visually. The tool allows you to create and edit queries without deep knowledge of SQL. You can also prepare and execute queries, and view the results of their execution.

To open Visual Query Builder, select the **Query** | **New Query** main menu item, or use the **New Query** button on the main toolbar (you can also use the *Ctrl+N* shortcut for the same purpose), and proceed to the **Builder** tab of the editor window.

#### See also:

SQL Editor

### Working with Query Builder area

The main working area of **Visual Query Builder** is the **Builder** area. Here you can create a query by placing the database tables and views onto the area, and edit it by selecting the required data fields and setting links between objects.

To add an object to the query, you can simply drag it from the <u>DB Explorer</u> tree to the Builder area.

To include a field in the query, check the corresponding box located to the left from the field name in the list, or just double-click it. To include all fields of the table/view, check the box located to the left of the table/view caption. If you do not check any fields, the SQL statement is generated as SELECT \* FROM <table/view\_name>, i.e. all the fields are included in the query.

*To exclude a field* from the query, uncheck the respective box. In order to remove the entire table/view from the query, close it by clicking the corresponding cross-button at the object caption, or select the object and press the **Del** key.

To edit the alias of a table/view, double-click the object caption and enter the new name.

🔟 [AdventureWorks on dooM_SERVER\TSERV2005] AdventureWorks on dooM_SERVER\TSERV 👝 🔳 💌		
Edit Builder History Favorites		
Edit Builder History Favorites		

**Note:** Depending on which query type you need to execute, you can select one from the drop-down list at the left: *Select, Insert, Update,* or *Delete*.

•

To create a **Union** or a **Subquery** use the Builder context menu.

Add union
Add subquery

Creation of a **Union** is reflected in *UNION* statement in the query text or *UNION ALL* statement if the <u>Union all by default</u> option is enabled. Union is used to combine several queries.

Create **Subquery** to use it as a source for the main query.

### See also:

Joining tables Setting criteria Setting output fields Setting grouping criteria Setting sorting parameters Working with the editor area Query execution

### Joining tables

The **Builder** area allows you to associate two objects by their fields: this operation is performed by dragging a field from one object list to another. This will set a link between these objects by the selected fields. It is indicated by a bidirectional arrow between the linked fields.

You can *view the link properties* of objects association: set the mouse cursor over the linking arrow, and a hint containing the association condition will popup after a short delay.

🔛 [AdventureWorks on dooM_SERVER\TSERV2005] AdventureWorks on dooM_SERVER\TSERV 👝 📧 💌		
Edit Builder History	y Favorites	
Edit Builder History	Y Favorites Query 1 Person.StateProvince StateProvinceCode CountryRegionCode IsOnlyStateProvinceFlag Name TerritoryID Person.CountryRegionCode Name CountryRegionCode IsOnlyStateProvinceFlag Name CountryRegionCode StateProvinceFlag Name CountryRegionCode StateProvinceFlag Name CountryRegionCode StateProvinceFlag Name TerritoryID Image: StateProvinceFlag Name TerritoryID Image: StateProvinceFlag Image: StateProv	

*To edit the link properties*, double-click the linking arrow or right-click it and select the **Property** popup menu item. The **Link properties** dialog allows you to change the association condition by choosing it from the drop-down list (=, >, <, >=, <=, <>).

Link properties	X	
join tables: Person.CountryRegion and Person.StateProvince		
CountryRegionCode =	<ul> <li>CountryRegionCode</li> </ul>	
Include all from Person.CountryRegion	Include all from Person.StateProvince	
OK	Cancel	

For your convenience the  $\ensuremath{\overline{\mathbb{M}}}$  Include all option is available for each object of the association.

If left **Include all** option is checked the *LEFT OUTER JOIN* statement will be added to the query.

If right **Include all** option is checked the *RIGHT OUTER JOIN* statement will be added to

the query.

If both **Include all** options are checked the *FUll OUTER JOIN s*tatement will be added to the query.

If none of the include options is selected then the *INNER JOIN* statement will be added to the query.

Click **OK** to apply the changes you have made.

*To remove a link* between objects, right-click the linking arrow and select the **Delete link** popup menu item.

To add a point to the link line, right-click the linking arrow and select the **Insert point** popup menu item. Using the point you can move the link line easily. The point does not cause any changes to the query, it is only used for the diagram representation and makes visual building handy and more comprehensible.

See also: Working with Query Builder area Setting criteria Setting output fields Setting grouping criteria Setting sorting parameters Working with the editor area Query execution

### **Setting criteria**

Use the **Criteria** tab to set the selection conditions.

*To add a condition*, click the ellipsis button on the left, and select the **Add condition** popup menu item.

*Edit the condition* by clicking the elements of the condition pattern and setting the necessary values. Clicking the numbered button to the left of the condition string activates the popup menu which allows you to *add a new condition* of the same enclosure level, *add a new enclosure level*, *delete the current condition*, *expand* or *collapse* enclosure levels of the condition (if the condition is composite).

A simple condition pattern contains three elements: an argument, a condition operator and a second argument (if required for the condition).

Clicking each element field allows you to set its value. When clicking the argument field, you can edit the argument as a text string: set an object name or a certain value in this field. Right-clicking the field in the edit mode activates the popup menu with the **Insert field** function (also called by *Shift+Enter* shortcut). This function allows you to select a field from the list of all the table fields.

Clicking the condition operator field activates the popup menu where you can specify the condition you need.


The way the conditions are used is set in the upper string of the area (All, Any, None or Not all of the following are met). Click the green link to change it.

#### See also:

Working with Query Builder area Joining tables Setting output fields Setting grouping criteria Setting sorting parameters Working with the editor area Query execution

# Setting output fields

The **Selection** tab displays the output fields of the query as a grid.

🔀 [AdventureWorks on	dooM_SERVER\TSERV2005] AdventureWorks	on dooM_SERVER\TSE	RV2005 5		٢.
Edit Builder History	Favorites				
Select				•	-
Query 1	Query 1				
ſ	Person.StateProvince				וך
	StateProvinceID				
	StateProvinceCode CountryRegionCode	Person.CountryR	egion 🔔 🗴	1	
	□ IsOnlyStateProvinceFlag	CountryRegionCode			
	✓ Name	✓ Name ModifiedDate			
3					
	< III				
	Criteria Selection Grouping criteria Sorting				
	Select only unique records	[	🔄 up	down	
	Source field name	Name of output field	Aggregate	Grouping	
	Person.StateProvince.StateProvinceID	StateProvinceID		Yes	
	Person.StateProvince.StateProvinceCode	StateProvinceCode		Yes	
	Person.StateProvince.CountryRegionCode	FIELD_1	VAR		
	Person.StateProvince.Name	Name		Yes	
	Person.CountryRegion.Name	Name		Yes	
	Person.CountryRegion.CountryRegionCode	CountryRegionCode		Yes 🔻	
					<u>"</u>

## Select only unique records

If you check this option, the duplicate records (if any) are not included into the query result (i.e. the DISTINCT keyword is added to the SQL query text).

To reorder fields in the list, use the 🔼 🔽 buttons.

The grid allows you to edit the names of the query output fields, specify their displaying order and set the aggregate functions (*SUM*, *MIN*, *MAX*, *AVG*, and *COUNT*) for each field. To remove a field from the list, right-click the field row and select the **Delete selected rows** popup menu item.

Delete selected rows
Insert query
Insert CASE

To change the input query field, double click it and then type the field name on the keyboard or choose it from the drop-down list.

To change the output query field name, set the cursor at the corresponding column and type the required field name.

To set an aggregate function for a field, click the field row within the **Aggregate** column, and then type in the function name or select one from the drop-down list. The list contains user-defined aggregates too.

The **Grouping** column displays the grouping state for each of the output fields.

The popup menu also allows you to *insert a nested query* and add a *CASE* clause. To edit the CASE clause, use the **CASE END AS** dialog.

#### Name

Use the drop-down list to define field to which the condition will be applied..

#### Alias

Name of the column that stores result values.

Use **WHEN** and **THEN** fields to define actual column values and their substitutions respectively. Empty WHEN clause states for all non-specified actual values. Such values will be substituted by the corresponding value specified in the THEN list.

#### See also:

<u>Working with Query Builder area</u> Joining tables <u>Setting criteria</u> <u>Setting grouping criteria</u> <u>Setting sorting parameters</u> <u>Working with the editor area</u> <u>Query execution</u>

# Setting grouping criteria

The **Grouping criteria** tab allows you to set the conditions for grouping query records.

The grouping condition pattern fields are set in the same way as those of the <u>Criteria</u> pattern.

KartureWorks o	dooM_SERVER\TSERV2005] AdventureWorks on dooM_SERVER\TS	ERV2005 5	
Edit Builder Histor	Favorites		
Select			
····· 😑 Query 1	Query 1		
	Person.StateProvince		
	StateProvinceID		
	StateProvinceCode	Region 💷 🗴	a
	□ IsOnlyStateProvinceFlag	e	
	Name Modified Date		
1			_
	< III.		
	Criteria Selection Grouping criteria Sorting		
	Select only unique records	Na	down
l i i i i i i i i i i i i i i i i i i i	Source field name Name of output field	Aggregate	Grouping
	Person.StateProvince.StateProvinceID StateProvinceID		Yes
	Person.StateProvince.StateProvinceCode StateProvinceCode		Yes
	Person.StateProvince.CountryRegionCode FIELD_1	VAR	
	Person.StateProvince.Name Name		Yes
	Person.CountryRegion.Name Name		Yes
	Person.CountryRegion.CountryRegionCode CountryRegionCode		Yes 🔻
		-	

These conditions will be included in the HAVING statement of the generated SQL query.

See also: Working with Query Builder area Joining tables Setting criteria Setting output fields Setting sorting parameters Working with the editor area Query execution

## **Setting sorting parameters**

The **Sorting** tab allows you to set the sorting parameters for the records returned by the query.

🔀 [AdventureWorks o	n dooM_SERVER\TSERV2005] AdventureWorks on dooM_SERVER\TSERV2005 5
Edit Builder Histor	y Favorites
Select	•
Query 1	Query 1
	Person.StateProvince
	StateProvinceID
	StateProvinceCode
	SonlyStateProvinceFlag
	✓ Name ModifiedDate
8	
	· · · · · · · · · · · · · · · · · · ·
	Criteria Selection Grouping criteria Sorting
	Output fields
	Person.StateProvince.Name Person.StateProvince.StateProvinc Ascending
	FIELD_1 Person.StateProvince.TerritoryID Descending
	Person.StateProvince.IsOntyStateProvinceF
	Person.StateProvince.rowguid
	Person StateProvince.ModifiedDate
	Person.CountryRegion.Name

The working area contains the **Output fields** list (at the left) which represents all the output query fields, and the **Sorted fields** list (at the right) which contains the fields to sort records by.

To move a field from one list to another, drag the selected field or use the **Add** and **Remove** buttons.

To change the sorting order for a sorted field, select the field in the **Sorted fields** list and move it using the **Up** and **Down** buttons.

To change the sorting direction, select the field in the **Sorted fields** list and switch the direction (*Ascending*, *Descending*) using the corresponding **A..Z/Z..A** button.

See also: Working with Query Builder area Joining tables Setting criteria Setting output fields Setting grouping criteria Working with the editor area Query execution

# Working with the editor area

The **Editor area** of <u>Visual Query Builder</u> is available within the **Edit** tab and is provided for working directly with the SQL query text which is generated automatically while you build the query visually.

🔟 [AdventureWorks on dooM_SERVER\TSERV2005] AdventureWorks on dooM_SERVER\TSERV2005 5
Edit Builder History Favorites
SELECT
Person.StateProvince.StateProvinceID,
Person.StateProvince.StateProvinceCode,
VAR(Person.StateProvince.CountryRegionCode) AS FIELD_1,
Person.StateProvince.Name,
Person.CountryRegion.Name,
Person.CountryRegion.CountryRegionCode
FROM
Person.CountryRegion
INNER JOIN Person.StateProvince ON (Person.CountryRegion.CountryRegionC
WHERE :
Person.CountryRegion.CountryRegionCode IS NOT NULL AND
Person.StateProvince.StateProvinceID BETWEEN 1 AND 10
ORDER BY
Person.StateProvince.StateProvinceID,
Person.StateProvince.lerritoryID DESC,
Person.StateProvince.countryRegionCode

You can edit this text according to the rules of SQL, and all the changes will be displayed within the **Builder** tab respectively.

To learn more about the SQL Editor features available within the Edit tab, see <u>Working</u> with SQL Editor area.

See also:

Working with Query Builder area Joining tables Setting criteria Setting output fields Setting grouping criteria Setting sorting parameters Query execution

# **Query execution**

When all the query parameters are set, you can **execute the query** in <u>Visual Query</u> <u>Builder</u>.

To execute a query, select the **Query | Execute** main menu item, or use the **\blacktriangleright Execute query** button on the main toolbar. You can also use the *F9* hot key for the same purpose.

If the query parameters are specified correctly, the query is executed and, in case the query statement is supposed to return data (e.g. as SELECT statement), the Results area containing the returned data appears within the **Data** tab. The position of the tab depends on the **Query results on separate tab** option selection (see <u>Environment</u> options | Preferences). If any of the query parameters contain errors, the query execution is stopped and the corresponding error message is displayed in the status bar area at the bottom of the Builder window.

By default, data returned by a query are displayed as a grid (see <u>Data View</u> for details).

Edit Builder History Favorites
Select
B Query 1 B Query 1
Person.StateProvince StateProvinceID StateProvinceCode CountryRegionCode IsOnlyStateProvinceFlag Name TerritoryID III
Criteria Selection Grouping criteria Sorting
All of the following are met         1.       Person.CountryRegionCode       IS NOT NULL         2.       Person.StateProvince.StateProvinceID       BETWEEN       1 AND       10
Data
Results
StatePro Sta Co Name Name_1
AB CA Alberta Canada
2 AK US Alaska United States
Grid View Form View Diagram View
Records fetched: 181/181 Read Only

# See also:

Working with Query Builder area Joining tables Setting criteria Setting output fields Setting grouping criteria Setting sorting parameters Working with the editor area

# 3.3.3 Query History

81

Use the **History** tab to access the list of recently executed queries.

🔀 [AdventureWorks on doc	M_SERVER\TSERV2005] Ad	lventureWorks on doo	M_SERVER\TSERV2005 5				
Edit Builder History Fa	avorites						
Query Name	Date	SELECT					
Countries	20.06.2013.17:21:59	Person.	StateProvince.StateProvinceI				
Employees_addresses	Activate Query		tateProvince.StateProvinceC				
Employee review	Rename Query		tateProvince.CountryRegionC				
Countries	Delete Queny from Hist	ton	tateProvince.isonlyStatePro				
Countries	Delete Query nominist	lory	cuptryRegion CountryRegion(				
AdventureWorks on dool	Clear History		ountryRegion.Name				
	Add to Favorite Querie	s					
	Show Histopy for the C	urrant Quany Only	tateProvince				
	Show History for the C	urrent Query Only	IN Person.CountryRegion ON				
	5	WHERE					
		Person.(	CountryRegion.CountryRegionC				

The working area contains the grid where query names and the execution dates are listed, and the corresponding SQL text for each of the selected queries.

The **context menu** of the grid allows you to perform various operations over the currently selected query: *activate*, *rename* or *delete* the selected query, *add* the query to the Favorite Queries list, clear the history list or choose to *display* history for the current query only.

### See also:

<u>SQL Editor</u> <u>Visual Query Builder</u> <u>Query Plan</u>

# 3.3.4 Query Plan

Using SQL Query for SQL Server, you can view **the plan** for each of the queries created and executed in the application. The query plan is available within the corresponding **Plan** tab.

To view the **Plan** of a query, open the query in <u>SQL Editor</u> or <u>Visual Query Builder</u> and use the **Explain Query** button on the main toolbar, proceed to the **Results** tab, and then to the **Plan** tab there.

	[Adventu	reWorks on dooM_S	ERVER\TSERV2005]	Employees_ad	Idresses							,
E	dit Buik	der History Favorit	es Results									
D	ata Pla	an										
E	xplain pl	an										
0	peration		Logical Operation	Subtree Cost	IO Cost	CPU Cost	Executions	Rows	Row Size	Parallel	Statement	t
	SELECT			100,0	0	0		293			SELECT	HumanResou
	🖹 Neste	ed Loops	Inner Join	100,0	0,0	4,3	1	293	517		Nested Lo	ops(Inner Joir
	🖨 Ha	ish Match	Inner Join	43,3	0,0	91,7	1	290	485		Hash Mat	ch(Inner Join,
		Clustered Index Scan	Clustered Index Sca	4,9	26,6	1,7	1	290	39		Clustered	Index Scan(O
		Clustered Index Scan	Clustered Index Sca	9,1	52,0	1,7	1	290	453		Clustered	Index Scan(O
	Clu	ustered Index Seek	Clustered Index See	55,3	21,5	0,6	290	1	38		Clustered	Index Seek(O
•												- F

If you wish to make the **Query Plan** tab enabled by default for each executed query, select the **Queries with explain plan** option within the <u>Preferences</u> section of the <u>Environment options</u> dialog.

See also: SQL Editor Visual Query Builder Query History

# 3.3.5 Favorite Queries

83

At this tab you can find the list of favorite queries.

Karreworks on dooM_SER	VER\TSERV2005] Employees_addre	esses			
Edit Builder History Favorites	Results				
Query Name Date	SELECT	Resources.Employee.EmployeeID.			
Employees_addresses 21.06.20	013 11:02:18 Human	nResources.Employee.NationalIDNumber,			
	Activate Query	Resources.Employee.ContactID, Resources.Employee.LoginID,	=		
	Rename Query	Resources.Employee.ManagerID,			
	Delete Query from Favorites	Resources.Employee.Title, Resources.Employee.BirthDate,			
Clear Favorites Resources.Employee.MaritalStatus,					
	HumanResources.Employee.Gender, HumanResources.Employee.HireDate, HumanResources.Employee.SalariedFlag,				
	Humar Humar	nResources.Employee.VacationHours, nResources.Employee.SickLeaveHours,			
	Humar	nResources.Employee.CurrentFlag,	Ψ.		
	<		•		
Query OK, 296 rows affec	cted (156 ms)		*		
			~		
1: 1	Query Results Unsaved	Highlighting Unicode (UCS-2)			

Select a query to preview it at the right part of the window. You can also manage the list of queries using the context menu: to open a query for editing - **Activate query**, to **Rename Query**, to **Delete Query from Favorites** and to **Clear Favorites**.

# See also:

<u>SQL Editor</u> <u>Visual Query Builder</u> <u>Query Plan</u>

# 3.4 Data management tools

**SQL Query for SQL Server** provides a number of tools you may need to manage data returned by your SQL queries.

The following list contains the most frequently used features implemented in SQL Query for efficient data management.

<u>Data View</u> <u>Custom Filter</u> <u>Filter Builder dialog</u>

See also: <u>Database Explorer</u> <u>Database management tools</u> <u>Query management tools</u>

# 3.4.1 Data View

SQL Query for SQL Server provides you with powerful tools for **viewing, editing and printing data** from tables and queries.

Upon a query execution the Results area containing the returned data appears within the **Data** tab. The position of the tab depends on the **Query results on separate tab** option selection (see <u>Environment options | Preferences</u>).

The data can be displayed in one of four available **modes**: *Grid View*, *Form View*, *Blob View* and *Diagram View*. The **status bar** at the bottom displays the number of records in the current dataset, the time the records were fetched by the application and the status of the records (whether the data are read-only or editable).

Please see the succeeding chapters to learn how to work with your data in the simplest and most efficient way.

Grid View Form View BLOB View Diagram View

### See also:

<u>Custom Filter</u> <u>Filter Builder dialog</u>

# **Grid View**

By default, data returned by a query are displayed as a grid. It is indicated by the **Grid View** tab selected on the View mode panel at the bottom of the **Results** area of the window. When in the **Grid View** mode, the columns correspond to the fields and the rows correspond to the records. Clicking the column caption sorts data by the values of this column in the ascending or the descending mode. The navigation pane at the top of the grid allows you to browse the data quickly, to insert, update and delete records, add bookmarks, and to set a filter for the records using the <u>Filter Builder</u> dialog. Within the **Find** field you can quickly set filter for the selected column.

Data							
Results							
<b>•</b>		♥₩ ≈ *	* 🗣	Find			
EMP_ 💌	DEPT 💌	JOB_GRADE	SALARY 👻	FULL_NAME	DEPARTMENT	HEAD.	
105	000	1	212 850,00	Bender, Oliver H.	Corporate Headquarters	Null	Monterey
85	100	2	111 262,50	MacDonald, Mary S.	Sales and Marketing	000	San Francisco
2	600	2	105 900,00	Nelson, Robert	Engineering	000	Monterey
46	900	1	116 100,00	Steadman, Walter	Finance	000	Monterey
9	622	3	75 060,00	Forest, Phil	Quality Assurance	620	Monterey
15	623	3	67 241,25	Young, Katherine	Customer Support	620	Monterey =
107	670	2	111 262,50	Cook, Kevin	Consumer Electronics Div.	600	Burlington, VT
20	671	3	89 655,00	Papadopoulos, Chris	Research and Development	670	Burlington, VT
94	672	4	56 295,00	Williams, Randy	Customer Services	670	Burlington, VT
11	130	4	86 292,94	Weston, K. J.	Field Office: East Coast	100	Boston
72	140	4	100 914,00	Sutherland, Claudia	Field Office: Canada	100	Toronto
34	110	3	61 637,81	Baldwin, Janet	Pacific Rim Headquarters	100	Kuaui —
118	115	4	7 480 000,00	Yamamoto, Takashi	Field Office: Japan	110	Tokyo
36	120	3	33 620,63	Reeves, Roger	European Headquarters	100	London
141	121	4	110 000,00	Osborne, Pierre	Field Office: Switzerland	120	Zurich 👻
•	-						ŀ.
Grid View	Form	View Diagram	View				
Records fe	etched: 17		F	Read Only			

The <u>context menu of the grid</u> provides additional functions, namely those used to show/ hide the <u>Group Box</u> for easier work with the grid, <u>to print data</u> or <u>to view/edit the column</u> <u>summary</u>.

# See also:

Form View BLOB View Diagram View

# **Grouping data**

If necessary, you can group the data in grid by any of the columns.

Data									
Results									
HEAD_DEPT									
EMP_NO 💌	JOB_GRAI 👻	DI 👻	SALARY 👻	FULL_NAME	DEPARTMENT	-	LOCATION		
HEAD_DEPT	Г:								
HEAD_DEPT	Г:000								
HEAD_DEPT	Г : 620								
9	3	622	75 060,00	Forest, Phil	Quality Assurance		Monterey		
15	3	623	67 241,25	Young, Katherine	Customer Support		Monterey		
HEAD_DEPT	Г:600								
107	2	670	111 262,50	Cook, Kevin	Consumer Electronics Div.		Burlington, VT		
HEAD_DEPT	Г:670								
HEAD_DEPT	Г : 100								
HEAD_DEPT	Г : 110								
HEAD_DEPT	Г : 100								
HEAD_DEPT : 120									
Grid View F	Grid View Form View Diagram View								
Records fetche	d: 17		Rea	ad Only					

This operation is performed by dragging the column header to the Group Box area at the top. In order to display this area, you can right-click the grid and select the **Show Group Box** item of <u>the context menu</u>.

When grouping by a column is applied to the grid, all the records are displayed as subnodes to the grouping row value as displayed in the screenshot below. To reverse grouping, just drag the column header back.

### See also:

<u>Filtering records</u> <u>Printing data</u> <u>Exporting results</u> <u>Using the context menu</u>

# Filtering records

A number of **filtering** facilities is implemented in the grid for your convenience. You can filter records in the grid in either of the following ways:

• click the arrow-down button next to the column caption to display the drop-down list and select any of the column values to filter records by this value of the selected column

or

• click the arrow-down button next to the column caption to display the drop-down list,

then select the **Custom** item and build a simple filter using the <u>Custom Filter</u> dialog or \_\_\_\_\_

• use the Set filter button on the navigation pane to invoke the Filter Builder dialog and create a composite filter using the dialog.

Data								
Results								
• • •	▶ ₩ ₩ ₩ ₹	Find						
								*
Drag a colum	in header here to group by that colur							
EMP_NO 👻	DEPARTMENT	FULL_NAME	JOB_GRADE 星	HEAD_	-	SALARY 👻	LOCA	
105	Corporate Headquarters	Bender, Oliver H.	(AII)	Null	000	212 850,00	Monte	
85	Sales and Marketing	MacDonald, Mary S	(Custom) 1	000	100	111 262,50	San F	
2	Engineering	Nelson, Robert	2	000	600	105 900,00	Monte	Ξ
46	Finance	Steadman, Walter	3	000	900	116 100,00	Monte	
9	Quality Assurance	Forest, Phil	3	620	622	75 060,00	Monte	
15	Customer Support	Young, Katherine	3	620	623	67 241,25	Monte	
107	Consumer Electronics Div.	Cook, Kevin	2	600	670	111 262,50	Burling	
20	Research and Development	Papadopoulos, Chri	3	670	671	89 655,00	Burling	
94	Customer Services	Williams, Randy	4	670	672	56 295,00	Burling	
11	Field Office: East Coast	Weston, K. J.	4	100	130	86 292,94	Bosto	
72	Field Office: Canada	Sutherland, Claudia	4	100	140	100 914,00	Toron	
34	Pacific Rim Headquarters	Baldwin, Janet	3	100	110	61 637,81	Kuaui	Ŧ
•		III					•	
Grid View	Form View Diagram View							
Records fetch	ed: 17 Re	ad Only						

After the filter is set, the gray **filtering panel** becomes visible at the bottom of the grid. This panel allows you to see the active filtering condition and easily enable or disable it using the checkbox on the left. If necessary, you can click the **Customize...** button on the right to customize your filter and add more complicated filtering conditions within the <u>Filter Builder</u> dialog.

## See also:

<u>Grouping data</u> <u>Printing data</u> <u>Exporting results</u> <u>Using the context menu</u>

# **Printing data**

Using the **Print Grid** item of the <u>context menu</u> you can activate the **Print Preview** mode which allows you to see the data grid in the way it will be printed, i.e. in the WYSIWYG mode.



When in **Print Preview** mode, you are provided with a powerful toolbar allowing you to design a report, change the view scope, save reports and load previously saved ones, and set a number of page printing parameters.

Print Preview	v ormat Go									£
) 🖻 🖆		2   🎛   🛱 🖄	)   🔳	) 🖹 🖪 🖪 🖁		53	100%	•	<b>+ +</b>   1	
Margins Left: 12,7 mm Top: 12,7 mm Right: 12,7 mm Bottom: 12,7 mm Header: 6,4 mm Footer: 6,4 mm										
Visual Query	/ Builder			1					1	
EMP_NO	FIRST_NAME	LAST_NAME	PHON	HIRE_DATE	DEPT	JOB_	JOB_GRAD	JOB_COUNTRY	SALARY	
2	Robert	Nelson	250	28.12.1988	600	VP	2	USA	105 900,00	
4	Bruce	Young	233	28.12.1988	621	Eng	2	USA	97 500,00	
5	Kim	Lambert	22	06.02.1989	130	Eng	2	USA	102 750,00	
8	Leslie	Johnson	410	05.04.1989	180	Mktg	3	USA	64 635,00	
9	Phil	Forest	229	17.04.1989	622	Mngr	3	USA	75 060,00	
11	K. J.	Weston	34	17.01.1990	130	SRep	4	USA	86 292,94	
12	Terri	Lee	256	01.05.1990	000	Admin	4	USA	53 793,00	
14	Stewart	Hall	227	04.06.1990	900	Finan	3	USA	69 482,63	
15	Katherine	Young	231	14.06.1990	623	Mngr	3	USA	67 241,25	
20	Chris	Papadopoulos	887	01.01.1990	671	Mngr	3	USA	89 655,00	
24	Pete	Fisher	888	12.09.1990	671	Eng	3	USA	81 810,19	
28	Ann	Benn	5	01.02.1991	120	Admin	5	England	22 935,00	
29	Roger	De Souza	288	18.02.1991	623	Eng	3	USA	69 482,63	
34	Janet	Baldwin	2	21 03 1991	110	Sales	3	USA	61 637 81	
26	Poger	Deevee	-	25.04.1991	120	Salae	2	England	33 620 63	
				111						
age: 1	of 4	Pages Paper S	Size:	215,9 mm x 27	9,4 mn	n S	tatus: Read	у		 Ī

# See also:

<u>Grouping data</u> <u>Filtering records</u> <u>Exporting results</u> <u>Using the context menu</u>

# **Exporting results**

**Exporting the result dataset** (e.g. when it is necessary to move the result of a query execution to a data medium) is implemented in SQL Query for SQL Server as the following facilities:

- exporting the dataset to a file of one of the supported formats (*MS Excel, MS Access, RTF, HTML, PDF, TXT, CSV*, etc.) can be performed with **Data Export for SQL Server** used (if the latter is installed on your system): use the **Export Data** toolbar button to start the export utility and follow the steps of the wizard to complete the exporting process;
- copying the dataset to Windows clipboard (e.g. when you need to paste it afterwards to a third-party editor): use the Export Data to Clipboard toolbar button for this purpose.

**Note:** To perform export to a *\*.accdb* file Microsoft Access Database Engine 2010 Redistributable is required.

### See also:

<u>Grouping data</u> <u>Filtering records</u> <u>Printing data</u> Using the context menu

### Using the context menu

The **context menu** of the grid is aimed at facilitating your work with data: you can perform a variety of operations using the context menu items.

Right-click the grid to open the context menu, and select the **Show Group Box** item if you wish to group the grid data, or the **Print Grid** item to activate the **Print Preview** mode.



If necessary, you can select the **Column Summary...** context menu item to open the **Column Summary** dialog which allows you to view and edit the summary for each particular column.

Column Summary				<b>×</b>
Column Summary Column EmployeeID NationalIDNumber ContactID LoginID ManagerID Title BirthDate MaritalStatus	* III	Footer summary <ul> <li>None</li> <li>Sum</li> <li>Minimum</li> <li>Maximum</li> <li>Count</li> <li>Average</li> </ul>	Group header None Sum Minimum Maximum Count Average	Group footer None Sum Minimum Maximum Count Average
Gender HireDate SalariedFlag VacationHours SickLeaveHours	Ŧ	Number format	Number format	Number format       Close

# See also:

<u>Grouping data</u> <u>Filtering records</u> <u>Printing data</u> <u>Exporting results</u>

# **Form View**

The **Form View** tab allows you to view data as a form. To activate this type of data view, select the **Form View** tab on the View mode panel at the bottom of the **Results** area of the window.

The form displays the current record: field names on the left and the corresponding values on the right. If the fields are available for editing, you can edit the record directly on this form. The navigation pane at the top of the form allows you to browse the data quickly, to insert, update and delete records, and to set a filter for the records using the <u>Filter</u> <u>Builder</u> dialog.

Data		
Results		
	* * 7	Find
CUST_NO	Null	1007
CUSTOMER	Null	Mrs. Beauvais
CONTACT_FIRST	V Null	
CONTACT_LAST	🔲 Null	Mrs. Beauvais
PHONE_NO	V Null	
ADDRESS_LINE1	🔲 Null	P.O. Box 22743
ADDRESS_LINE2	V Null	
СІТУ	🔲 Null	Pebble Beach
Grid View Form View Diagram View		
Records fetched: 15		Open Time: 15 ms

Each field has a  $\blacksquare$  **Null** checkbox which allows you to clear the field value and set it to NULL (if the field is nullable).

# See also:

<u>Grid View</u> <u>BLOB View</u> <u>Diagram View</u>

# **BLOB** View

The **BLOB View** tab allows you to view BLOB fields content. To activate this type of data view, select the **BLOB View** tab on the View mode panel at the bottom of the **Results** area of the window.

Using the BLOB Viewer/Editor you can select any of the available ways of BLOB data representation:

- <u>Viewing as Hexadecimal</u>
- <u>Viewing as Text</u>
- <u>Viewing as Rich text</u>
- <u>Viewing as Image</u>
- <u>Viewing as HTML</u>

Data
Results
EMS
Hexadecimal Text Rich text Image HTML
SQL Manager.net <sup>™</sup>
EMS® Database Management Solutions
Type: Bitmap Size: 131 K
<u>G</u> rid View Form <u>V</u> iew Blob View <u>D</u> iagram View
Records fetched: 1/1 LIMIT 1000 OFFSET 0

The **BLOB Viewer/Editor** provides an ability to navigate within the records using DB Navigation buttons on the navigation pane at the top of the viewer window.

Using items of the navigation pane and the context menu you can to browse the data quickly, to insert, update and delete records, set a filter for the records using the <u>Filter</u> <u>Builder</u> dialog, load new BLOB content and save the current content to files.

See also: Grid View Form View Diagram View

# Viewing as Hexadecimal

The **Hexadecimal** tab allows you to view/edit the BLOB data as hexadecimal.

Data																	
Results																	
		<b>)</b>	)  +	·I-		~[×		*	*5	7   F	ind			Ŧ			
EMS				•													
He <u>x</u> adecir	nal	Text	t <u>F</u>	<u>R</u> ich t	ext	Imag	je <u>I</u>	TML									
0x000:	3 C	70	3 E	3 C	73	74	72	6 F	6 E	67	3 E	45	4 D	53	20	51	<strong>EMS Q</strong>
0x010:	75	65	72	79	3 C	2F	73	74	72	6 F	6 E	67	3 E	20	69	73	ueryg> is
0x020:	20	74	68	65	20	74	6 F	6 F	6 C	20	74	68	61	74	20	61	the tool that a
0x030:	6 C	6 C	6 F	77	73	20	79	6 F	75	20	74	6 F	20	6 D	61	6 E	llows you to man
0x040:	61	67	65	20	53	51	4 C	20	71	75	65	72	69	65	73	20	age SQL queries
0x050:	74	6 F	20	79	6 F	75	72	0 D	0 A	64	61	74	61	62	61	73	to yourdatabas
0x060:	65	73	20	71	75	69	63	6 B	6 C	79	20	61	6 E	64	20	73	es quickly and s
0x070:	69	6 D	70	6 C	79	2 E	20	56	69	73	75	61	6 C	20	62	75	imply. Visual bu
0x080:	69	6 C	64	69	6 E	67	20	61	73	20	77	65	6 C	6 C	20	61	ilding as well a
0x090:	73	20	64	69	72	65	63	74	20	65	64	69	74	69	6 E	67	s direct editing
0x0A0:	20	6 F	66	20	71	75	65	72	79	20	74	65	78	74	20	69	of query text i
0x0B0	73	0.D	0 A	61	76	61	69	6 C.	61	62	6 C	65	2 F	20	55	73	s available Us 🔻
1:46						C	Dven	write									
Grid View	F	orm <u>\</u>	<u>/</u> iew	E	Blob \	View		iagra	m Vie	ew							,
Records fe	tched	1: 2/2															LIMIT 1000 OFFSET 0

The context menu of the working area provides additional functionality for BLOB Viewer/ Editor: use the **Save to File...** and the **Load from File...** context menu items to save the hexadecimal data to a file, or load data from a file.

### See also:

Viewing as Text Viewing as Rich text Viewing as Image Viewing as HTML

# **Viewing as Text**

The  $\ensuremath{\text{Text}}$  tab allows you to view/edit the BLOB data as simple text.

Data
Results
EMS
Hexadecimal Iext Rich text Image HTML
<strong>EMS Query</strong> is the tool that allows you to manage SQL queries to your databases quickly and simply. Visual building as well as direct editing of query text is available. User-friendly graphical interface allows you to connect to databases, select tables and fields for your queries, set selection criteria and much more. You can work with several queries at once, edit queries and view the execution results
in several modes and perform other operations you may need in your everyday work with
databases.
/ /hr>Vigit our web-gite for details: <a href="http://www.golmanager.net/"></a>
http://www.sglmanager.net/
4
Line: 8 Col: 1 CAPS NUM SCRL INS
<u>G</u> rid View Form <u>View</u> Blob View Diagram View
Records fetched: 2/2 LIMIT 1000 OFFSET 0

The context menu of the working area provides additional functionality for BLOB Viewer/ Editor: use the **Save as...** and the **Load...** context menu items to save the text to a \*. *txt* file, or load text from a file, the **Cut**, **Copy**, **Paste**, **Select All**, **Undo**, **Word Wrap** context menu items for editing the text efficiently, and the **Find.../Replace...** context menu items to use the <u>Find Text</u> and the <u>Replace Text</u> dialogs for working with the text content.

# See also:

Viewing as Hexadecimal Viewing as Rich text Viewing as Image Viewing as HTML

### Viewing as Rich text

The **Rich Text** tab allows you to view/edit the BLOB data in Rich Text format (RTF).

Data
Results
EMS
Hexadecimal Text Rich text Image HTML
<strong>EMS Query</strong> is the tool that allows you to manage SQL queries to your databases quickly and simply. Visual building as well as direct editing of query text is available. User-friendly graphical interface allows you to connect to databases, select tables and fields for your queries, set selection criteria and much more.         You can work with several queries at once, edit queries and view the execution results in several modes and perform other operations you may need in your everyday work with databases.      tabases.  Line: 1 Col: 1         CAPS       NUM         SCRL         Universe
Grid View Form View Blob View Diagram View
Records fetched: 2/2 LIMIT 1000 OFFSET 0

The context menu of the working area provides additional functionality for BLOB Viewer/ Editor: use the **Save as...** and the **Load...** context menu items to save the Rich Text to a \*.*rtf* file, or load text from a file, the **Cut**, **Copy**, **Paste**, **Select All**, **Undo** context menu items for editing the text efficiently, or the **Print** context menu item to print the content of the **Rich Text** tab.

# See also:

<u>Viewing as Hexadecimal</u> <u>Viewing as Text</u> <u>Viewing as Image</u> <u>Viewing as HTML</u>

# Viewing as Image

The **Image** tab allows you to view the BLOB data as image.

Data
Results
EMS
Hexadecimal Text Rich text Image HTML
SQL Manager.net <sup>™</sup>
EMS® Database Management Solutions
Type: Bitmap Size: 131 K
Grid View Form View Blob View Diagram View
Records fetched: 1/1 LIMIT 1000 OFFSET 0

The context menu of the working area provides additional functionality for BLOB Viewer/ Editor: use the **Save as...** and the **Load...** context menu items to save the image to a \*. *jpg* or a \*.*jpeg* file, or load an image from a file.

# See also: <u>Viewing as Hexadecimal</u> <u>Viewing as Text</u> <u>Viewing as Rich text</u> <u>Viewing as HTML</u>

# Viewing as HTML

The  $\mathbf{HTML}$  tab allows you to view the BLOB data as  $\mathbf{HTML}$  - in the way this data would be displayed by your Internet browser.

Data	
Results	
EMS	
Hexadecimal Text Rich text Image HTML	
<b>EMS Query</b> is the tool that allows you to manage SQL queries to your databases quickly and simply. Visual building as well as direct editing of query text is available. User-friendly graphical interface allows you to connect to databases, select tables and fields for your queries, set selection criteria and much more. You can work with several queries at once, edit queries and view the execution results in several modes and perform other operations you may need in your everyday work with databases.	*
Visit our web-site for details: <u>http://www.sqlmanager.net/</u>	-
Grid View Form View Blob View Diagram View	
Records fetched: 2/2 LIMIT 1000 OFFSET 0	

# See also:

Viewing as Hexadecimal
<u>Viewing as Text</u>
<u>Viewing as Rich text</u>
Viewing as Image

# **Diagram View**

The **Diagram View** tab allows you to represent data as diagrams of various types. To activate this type of data view, select the **Diagram View** tab on the View mode panel at the bottom of the **Results** area of the window.

You can build a diagram represented as bars, lines, areas, points or pies, colored or not, with axis visible or not; specify axis labels source, the diagram header and more. Use the tools of **Diagram View** to manage your diagram:

- <u>Selecting fields</u>
- Setting diagram properties
- Editing Chart dialog
- Exporting diagram as image

See also: Grid View Form View BLOB View

# **Selecting fields**

In order to build a diagram in **Diagram View**, first of all you should **select the source field(s)** to be represented in the diagram.



Note that only fields of numeric types can be used in a diagram, and each selected field is represented by a separate diagram series. Use the Diagram Control panel on the left to select the fields for your diagram. If the **Field Name** combo-box is empty then either the data source is not yet selected or it contains no numeric fields.

#### See also:

Setting diagram properties Editing Chart dialog Exporting diagram as image

### Setting diagram properties

When in the **Diagram View** mode, you are provided with facilities of customizing the diagram which are available within the Diagram Control panel located to the left of the graph itself.

#### **Diagram Title**

Use this box to enter the title of the diagram being created.

#### **Field Name**

Type in or use the drop-down list to select the name of the field to be represented in the diagram.

### Label Source

Type in or use the drop-down list to select the name of the field to take X-axis labels and diagram point marks from.

### **Diagram Type**

Define the way of the diagram representation (as Bar, Line, Area, Point, Pie or FastLine).

Diagram Title
Salary
Field Name
SALARY 👻
Label Source
•
Diagram Type
Pie 💌
Color each point
Show marks
V Show axis
Show legend
Monochrome
View 3D
View 3D walls
Export Diagram

### Color each point

If checked, each bar, point, line or sector of the diagram has an individual color; if not checked, all the points are colored red.

### Show marks

This option defines whether the diagram point marks are visible or not.

### Show axis

This option determines the visibility of the axis and the background grid.

### Show legend

This property is used to specify whether the legend rectangle should be displayed on the right side of the diagram or not.

### Monochrome

Set this option to convert the colors of the diagram into the gray scale (e.g. for BW-

printing).

🗹 View 3D

If this option is used, the diagram is represented as 3-Dimensional.

### View 3D walls

If this option is used, the diagram walls are represented as 3-Dimensional.

See also: Selecting fields Editing Chart dialog Exporting diagram as image

# **Editing Chart dialog**

If necessary, you can set a number of advanced properties of your diagram using the **Editing Chart** dialog.

To open this dialog, double-click the graph in **Diagram View**.

3 Editing Chart
Chart Series Data Export Print
Series General Axis Titles Legend Panel Paging Walls 3D
Zoom Scroll Cursor Fonts
Allow
Animated Steps: 8
Pen Pattern
Minimum pixels: 16
Direction: Both
Mouse Button: Left
Coom on Up Left drag
Help Close

Please, look through the brief description of the **Editing Chart** dialog tabs listed below:

- Chart
- Series
- <u>Data</u>
- Export
- Print

# See also:

Selecting fields Setting diagram properties Exporting diagram as image

# Chart

This tab of the dialog allows you to manage series and diagram appearance.

3 Editing Chart	<b>—</b> ×
Chart Series Data Export Print	
Series General Axis Titles Legend Panel Paging	Walls 3D
Series 1	↑ ½
Series2	Add
🔀 🗖 🗖 Series3	
	Delete
	<u>T</u> itle
	Clone
	Change
Help	Close

- <u>Series</u>
- <u>General</u>
- <u>Axis</u>
- <u>Titles</u>
- Legend
- Panel
- Paging
- Walls
- <u>3D</u>

This tab provides you with ability to add series to diagram, to delete or edit series.



Press the **Add** button to open the **TeeChart Gallery**, which allows you to choose suitable series type. You can also open this dialog for the selected series by pressing the **Change** button.



You can change diagram style within the drop-down list at the bottom of this dialog, make it 3D or Smooth.

Press the **Delete** button to delete the selected series.

To rename the selected series press the **Title** button and type in the needed name.

The **Clone** button adds a copy of the selected series.

Double-click a series to manage its data source and visual settings within the <u>Series tab</u> of the Editing Chart dialog.

Use this tab to define the zoom, scroll, cursor and font options.

**Zoom** section allows you to enable/disable zoom feature for the diagram preview, define whether zoom should be animated etc.

Chart Series Data Export Print
Series General Axis   Titles   Legend   Panel   Paging   Walls   3D
Zoom Scroll Cursor Fonts
Allow
Animated Steps: 8
P <u>e</u> n – P <u>a</u> ttern
Minimum pixels: 16
Direction: Both
Mouse Button: Left
🔲 Zoom on Up Left drag
J

You can set zoom **direction** to *horizontal* or *vertical* if needed (*both* is default).

Choose the mouse button which should cause zooming.

**Note:** To zoom the diagram you should separate the rectangle area of the diagram with the specified mouse button pressed and release the button when done.

With the default settings it is impossible to know the exact borders of the area you have selected for zooming. Press the **Pen...** button and enable the **Visible** option to make zooming area borders visible (you can also define border style, color and size), or press the **Pattern...** button and define style and color for the pattern that will substitute the area selected for zooming.

Use the Scroll section to enable diagram scrolling in horizontal, vertical or both directions,

or to disable scrolling at all (default).

Within the **Cursor** section you can change the cursor type, or load one from the external *\*.cur* or *\*.ani* file.

The **Fonts** section allows you to change font, color, border, shadow and other settings for the selected diagram element.

This tab allows you to customize axis settings.

Chart Series D	Data Export Print
Series General	Axis Titles Legend Panel Paging Walls 3D
<ul> <li>✓ Visible</li> <li>✓ Behind</li> <li>Axes:</li> <li>Left Axis</li> <li>Right Axis</li> <li>Top Axis</li> <li>Bottom Axis</li> <li>Depth Right</li> <li>Depth Top</li> </ul>	Scales       Title       Labels       Ticks       Grid       Position         Options       Minimum       Maximum       Increment         ✓       Automatic         ✓       Visible       Inverted         Log Base:       10       E
+ -	

**Scales** section allows you to manage *minimum*, *maximum* and *increment* values of the selected axis, its visibility and other options.

Title tab allows you to name the selected axis and to define the font and color settings.

**Labels** tab contain a number of options to customize labels. You can select the suitable *style*, *value format* and customize text settings.

Within **Ticks** and **Grid** tabs allow you to define the corresponded line's and ticks' style, size and color.

Use the **Position** tab to manage the axes position.

Within this tab you can select the needed title *text*, *style*, *pattern* and *color*, *border*, *shadow*, *gradient* and *background picture*.



Use the drop-down list to change the title type: Title, SubTitle, SubFoot, Foot.

**Legend** tab can be used to customize diagram's legend. You can define its *style*, *position*, *title*, *symbols*, *pattern* and *background color*, *border*, *text* font, *size*, *color*, and many other options.

Chart Series Data Export Print
Series General Axis Titles Legend Panel Paging Walls 3D
Style Position Symbols Title Format Border Text Gradient Shadow Picture
✓ Visible Legend Style: Automatic ✓
☐ Inverted Text Style: Left Value ▼
Eont Series Color Vert. Spacing: 0
No check boxes   Dividing Lines

Use this tab to manage the diagram main panel. You can customize its *color*, *borders*, *margins*, *gradient*, *shadow* and *background image*.



Within this tab you can split diagram into pages and navigate between them.

Use the **Current Page Legend** option to define whether to show legend for current page or for whole chart.

Chart Series Data Export Print	
Series General Axis Titles Legend Panel Paging Walls 3D	
Points per Page: 15 No pages ✓ Current page Legend ✓ Scale Last Page	
Auto scale axis	
[< ► ► Page 1 of 3	

If the **Scale Last Page** option is disabled then the scale will be expanded proportionally to the number of pages created, otherwise the scale maximum will be equal to the chart maximum.

The **Walls** tab allows you to manage chart walls *visibility*, *size* and *appearance*.

Chart Series Data	Export Print
Series General Axis	s Titles Legend Panel Paging Walls 3D
✓ Visible Walls	Size: 0
Left Right Bott	om Back
<u>C</u> olor	✓ Visible
B <u>o</u> rder —	🔽 Dark 3D
Pattern	∏ <u>A</u> uto Hide
<u>G</u> radient	Transparent
Position: Start: 0 End: 100	Siz <u>e</u> : 0 · · · · · · · · · · · · · · · · · ·

Select the needed wall tab and define its properties.

Within this tab you can customize 3D view of the diagram.

You can select one of the template views represented at the **Views** tab



and/or customize the diagram 3D view manually.

Chart Series Data	Export Print		
Series General Axis	Titles Legend	Panel Paging Walls	3D
Options Views			
✓ <u>3</u> Dimensions	Zoom:		100%
3 <u>D</u> %: 15	<u>R</u> otation:	ļ	360
🔲 Orthogonal	Elevation:		315
Angle: 45	Horiz. Offset:		0
Clip Points	Vert. Offset:		0
	Perspective:		0
✓ Zoom Text	100 • %	ĭ	
P			

# 3 Dimensions

This option indicates whether 3D view is applied to diagram. You can also set the 3D ratio within the 3D % field.
## Orthogonal

Use this option to use orthogonal view and rotation. Note that basic rotation will not be possible in this case.

# Clip Points

Enable this option to restrict chart height with the scale grid borders.

## Zoom Text

Use this option to manage text size relatively to diagram.

There are a number of sliders on the right, that may help you to adjust your diagram view.

# Series

The **Series** tab will help you to manage the created series.

Chart Series Data Export Print
Series1 💽 🍼 🍞 Pie: Series1
Format Circled General Marks Data Source
Options Group Slices Colors Marks
Explode biggest: 0 📩 🔽 Dark 3D
Total angle: 360 Patterns
Dark Border: 0 Border—
Multiple Pies: Automatic
3D <u>G</u> radient

#### Format

This section allows you to customize basic format options and is unique for each diagram type.

# General

Use this section to define general options, value formats and axes settings.

#### Marks

Within this section you can change marks' *style* and *format*, *arrows visibility* and *appearance*, *symbol* options, *margins size* and *position*, *borders type* and *size*, *text* options and other.

#### **Data Source**

This tab allows you to select data source for the selected series.



Drop-down list contains various types of sources:

- Manual the values should be typed in manually;
- Random use random values;
- Series use the existing series as data source;
- Function use function as data source;
- Single record take a single record values as data source;
- Summary use column summary;
- Dataset assign dataset to the selected series.

# Data

At this tab you can view and edit current series data. Double-click a cell to activate edit mode.

Editing Ch	art					×
Chart Series	; Data E	xport Print				
		Series1				<u>^</u>
# Colors	Text	Pie				
0		105 900				
1		97 500				
2		102 750				
3		64 635				
4		75 060				
5		86 292,94				
6		53 793				
7		69 482,63				
8		67 241,25				
9		89 655				
10		81 810, 19				
11		22 935				
12		69 482,63				
13		61 637,81				-
м	<	•	Þ	· A	SD 3D	х 🖻
<u>H</u> elp					Close	

# Export

This tab allows you to export diagram as picture, as xml, binary or text. Series data export is also possible within the Data section.



Choose the export type first: as picture, native formats or data. Then select the result file format, define the needed options and press the **Copy** button to export to clipboard, **Save...** to save as a file or **Send...** to e-mail the exported file.

# Print

Use this tab to print the diagram.



Specify *page orientation*, *margins*, *text size* and common *printing options*. When all is done, press the **Print** button.

# Exporting diagram as image

Additionally to its main functionality, the **Diagram View** mode provides you with an ability **to export the current diagram** to a file as a graphical image, with a lot of formats supported. This feature is implemented as the **Export Diagram Wizard**.

To launch the wizard, click the **Export Diagram** button on the Diagram Control panel, and follow the instructions of the wizard.

- <u>Setting file name and format</u>
- Export Diagram options

See also: Selecting fields Setting diagram properties Editing Chart dialog

## Setting file name and format

This step of the wizard allows you **to select the output file format** to save the diagram to.

Use the **Destination format** radio group to select the desired graphical file format, and specify the output file name in the **Destination file name** box.

Export Diagram Wizard					<b>×</b>
Export Diagram					
Specify destination file r	name and format for	exporting the d	liagram		
SQL Query for	Welcome to the This wizard allo Windows metal The wizard will file. Destination fo	Export Diagra ows you to exp file, BMP, PDF, guide you thro ormat O PDF	m Wizard! ort diagram as an i WML, JPEG and i ugh the process o O JPEG O PNG	image in most po much more. f exporting diag GIF	opular formats, such as ram into the graphical
SQL Server	Destination file	name es\EMS\SQL Q	uery for SQL Sen	/er\Diagram1.bn	np
Help			< <u>B</u> ack	<u>N</u> ext >	Cancel

Click the **Next** button to proceed to the <u>Export Diagram options</u> step of the wizard.

# **Export Diagram options**

Use this step of the wizard to set the output image **width** and **height** in the corresponding spin edits.

## Keep aspect ratio

This option determines whether the aspect ratio should be kept for the exported image or not.

#### **Open exported diagram in associated program**

Check this option to view the image after the export is completed; the image will be opened with the application which is associated with this file type on your system.



If necessary, you can return to the <u>previous step</u> using the **Back** button and make the appropriate changes for the diagram being currently exported.

Click the **Finish** button to complete the diagram exporting process.

# 3.4.2 Custom Filter

The **Custom Filter** dialog is one of the <u>filtering</u> facilities implemented in <u>Data View</u> for your convenience.

To open the dialog, click the Arrow-Down button next to the column caption, and select the **Custom** item from the drop-down list.

Select a logical operator for checking the column values (*like*, *is less than*, *is greater than*, etc.) and set a value to be checked by this operator in the corresponding box on the right.

Data				
Results				
	• <b>H</b> + - • / × 🖎	* 🐨 Find		
DEPT_ID	DEPARTMENT_NAME	MANAGER_ID GRO	DUP_NAME 🛛 💌	
1:	9 Contracting	6 Sales	s and Marketing	
	8 Sales	9 Sales	s and Marketing	
f	Custom Filter		<b>—</b>	
	Show rows where: GROUP_NAME	▼ %Mark%		
AND OR				
Use _ to represent any single character Use % to represent any series of characters OK Cancel				
Customize				
4				
Grid View For	m <u>V</u> iew <u>D</u> iagram View			
Records fetched: 2	21/21	Records filte	LIMIT 1000 OFFSET 0	

If necessary, you can set the second condition and specify the relation between the two conditions: whether both of them should be satisfied (*AND*) or just any of them (*OR*). Use the '\_' character to represent any single symbol, and use the '%' character to represent any series of symbols in the condition string.

# See also: Data View Filter Builder dialog

# 3.4.3 Filter Builder dialog

The **Filter Builder** dialog is a powerful <u>filtering</u> tool implemented in <u>Data View</u> for your convenience.

The dialog is aimed at facilitating the procedure of creating and applying complex filter criteria for data. In addition, the tool allows you to save filter criteria to an external \*.flt file for future use.

To open the **Filter Builder** dialog, use the **Set filter** button on the navigation pane.

- Invoking the Filter Builder dialog
- <u>Adding a new condition</u>
- <u>Setting filter criteria</u>

- Setting filter operator
- <u>Setting filter criteria values</u>
- <u>Adding a new group</u>
- <u>Setting group operator</u>
- <u>Applying filter conditions</u>

# See also:

Data View Custom Filter

# Invoking the Filter Builder dialog

The Filter Builder dialog can be invoked in either of the following ways:

- if a <u>simple filter</u> or the <u>Custom Filter</u> is being used, click the **Customize...** button on the gray **filtering panel**;
- use the Set filter button on the navigation pane and create a composite filter using the dialog.

The succeeding pages of this chapter are intended to illustrate usage of the **Filter Builder** dialog. Please see the instructions below to learn how to perform various operations in the easiest way.

#### See also:

Adding a new condition Setting filter criteria Setting filter operator Setting filter criteria values Adding a new group Setting group operator Applying filter conditions

# Adding a new condition

Suppose we need to select data from the sample table Employee to view the list of male engineers belonging to the *Engineering* and *Tool Design* departments that were hired after 10/1/2007. These criteria are applied to the *Gender*, *HireDate*, *Position* and the *DepID* fields.

Filter builder - [untitled.flt]	×
Filter AND <root></root>	
press the button to add a new condition	
Open         Save As         OK         Cancel         Apply	

Click **press the button to add a new condition** - this will add a new condition to the criteria. Alternatively, you can click the **Filter** button and select the **Add Condition** popup menu item.

#### See also:

Invoking the Filter Builder dialog Setting filter criteria Setting filter operator Setting filter criteria values Adding a new group Setting group operator Applying filter conditions

# Setting filter criteria

As we need to apply the filter criteria to the *HireDate* field, we click the column box (next to the ellipsis  $\square$  button) to open the drop-down list displaying the available column names and select the *HireDate* item.

Filter builder - [untitled.flt]	×
Filter       AND <root>         Image: D       HireDate       ew condition         Pres       Trite       ew condition         BirthDate       MaritalStatus       Gender         HireDate       SalariedFlag       VacationHours         SickLeaveHours       CurrentFlag       rowguid         ModifiedDate       T</root>	
Open         Save As         OK         Cancel         Apply	

# See also:

Invoking the Filter Builder dialog Adding a new condition Setting filter operator Setting filter criteria values Adding a new group Setting group operator Applying filter conditions

# Setting filter operator

Since we need the list of employees hired after 10/1/2007, we need to select the *IS* GREATER THAN operator from the corresponding drop-down list.

Filter builder - [untitled.flt]	<b>—</b>
Filter AND <root> HireDate equals <empty> equals does not equal is less than is less than is less than or equal to is greater than or equal to is blank is not blank between not between in not in</empty></root>	
Open Save As	OK Cancel <u>Apply</u>

# See also:

Invoking the Filter Builder dialog Adding a new condition Setting filter criteria Setting filter criteria values Adding a new group Setting group operator Applying filter conditions

# Setting filter criteria values

Next, we need to specify value '10/1/2007' for the IS GREATER THAN operator.

Similarly, if, for example, we need to get the list of employees hired during the 9/1/2007 - 10/1/2007 term, we set the *BETWEEN* filter operator (this will add two empty value boxes to specify the inclusive range for the *BETWEEN* condition) and specify the range for the operator, i.e. the '9/1/2007' and the '10/1/2007' values in the corresponding value boxes.

It is possible to set the date value **manually** by typing it in, or via the **date editor** which is activated when you click the value box.

Filter builder - [untitled.flt]	3
Filter AND <root></root>	
HireDate is greater than 01.10.2007	
press the button to add a new condition	
Open         Save As         OK         Cancel         Apply	

Editors used in value boxes are determined by the **data type** assigned to the corresponding columns.

See also:		
Invoking the Filter Builder dialog		
Adding a new condition		
<u>Setting filter criteria</u>		
<u>Setting filter operator</u>		
Adding a new group		
Setting group operator		
Applying filter conditions		

# Adding a new group

Since we also need to get the list of male specialists-engineers (i.e. those registered in the *Engineering* and *Tool Design* departments and having an engineering-oriented position), we can add a complex filter condition combining simple conditions with the *AND* operator. (However, in this particular case we can just add them on the same root level as for the existing condition).

Filter builder - [untitled.flt]	x
Filter AND <root></root>	
HireDate is greater than 01.10.2007	
Add Condition Idition	
Add Group	
Remove Row	
Open Save As OK Cancel Apply	

If you need to add a group of conditions, click the ellipsis button for the *HIRE\_DATE* condition and select the **Add Group** popup menu item.

# See also: Invoking the Filter Builder dialog Adding a new condition Setting filter criteria Setting filter operator Setting filter criteria values Setting group operator Applying filter conditions

# Setting group operator

Conditions of complex criteria can be combined with any of the four logical operators used: *AND*, *OR*, *NOT AND*, *NOT OR*.

Filter builder - [untitled.flt]	x
Filter AND <root></root>	
HireDate is greater than 01.10.2007	
AND applies to the following conditions	
AND OR yeelD equals <empty></empty>	
NOT AND button to add a new condition	
Open Save As OK Cancel Apply	

In our case it is enough to click the **group operator** box and select the *AND* item from the drop-down menu.

See also:	
Invoking the Filter Builder dialog	
Adding a new condition	
<u>Setting filter criteria</u>	
<u>Setting filter operator</u>	
Setting filter criteria values	
Adding a new group	
Applying filter conditions	

# Applying filter conditions

Suppose we have created a condition within the new group. If we need, we can <u>add more</u> <u>conditions</u> at the same level and specify the required values using the value boxes. When the operation is completed, the **Filter Builder** dialog will look like in the screenshot below.

Click the **Apply** button to see the result of the filtering you have made, and click **OK** or **Cancel** to close the dialog with or without saving your filter conditions respectively.

Filter builder - [untitled.flt]	×
Filter AND <root></root>	
HireDate is greater than 01.10.2007	
AND applies to the following conditions	
Gender equals M	
······ <u>Title</u> <u>like</u> %Engineer%	
ManagerID in (1, 2) +	
press the button to add a new condition	
Open Save As OK Cancel Apply	

The **Filter Builder** dialog allows you to save filter criteria to and load them from external files. Clicking the **Save As...** or the **Open...** buttons activates the corresponding dialogs. Filter settings are stored in \*.*flt* files.

Please be informed that a column in the file is referenced by its position within a view, hence filter settings cannot be correctly restored if columns have been deleted from the view after saving the filter to a file.

See also: Invoking the Filter Builder dialog Adding a new condition Setting filter criteria Setting filter operator Setting filter criteria values Adding a new group Setting group operator



# 4 Personalization

**SQL Query for SQL Server** provides you with capabilities for flexible personalization of the application.

Please see the chapters below to learn how to use tools effectively.

Environment options Editor options Visual options Save Settings Keyboard templates Localization

# 4.1 **Options**

The following list contains the three basic groups of **options** available in SQL Query for SQL Server.

- Environment options
- Editor options
- Visual options
- <u>Save Settings</u>

See also: Keyboard templates Localization

# 4.1.1 Environment options

**Environment Options** allow you to customize general options of the SQL Query application.

To open the **Environment Options** window, select the **Options | Environment Options...** main menu item, or use the **binvironment Options** button on the main toolbar.

Preferences Default Sheet Confirmations DB Explorer Query Builder Color Palette Fonts Grid Report Localization

#### See also:

Editor options Visual options

# Preferences

## General

# Save desktop on disconnect

This option determines whether the previously opened windows and their positions should be restored upon connection to the database.

# **Use transactions**

If this option is checked, all queries are executed in transactions, otherwise each query is executed separately with autocommit.

#### Disable multiple instances

This option prevents users from running multiple instances of SQL Query for SQL Server on one system simultaneously.

Environment Options			x
Preferences	Preferences		
Default Sheet	General		5
B DB Explorer	Save desktop on disconnect	Show splash screen at startup	
🕀 🔛 Query Builder	Use transactions	Autoconnect databases at startup	
TI Fonts	Disable multiple instances	Queries with explain plan	
Grid	Vise EMS SQL Manager repository	Query results on separate tab	
Report	Allow query parameters	Encrypted passwords	
	History V Use history History depth 30 Show history for current query only SQL Timeout SQL Timeout		
	<b>9 y</b> 300.	QK <u>C</u> ancel <u>H</u> elp	

#### Allow query parameters

This feature allows you to specify different values within a query in a popup dialog just before the query execution. Use the colon (':') character before an identifier (e.g. :P1) to specify a parameter within the query.

#### Show splash screen at startup

Displays the splash screen of SQL Query for SQL Server at the application startup.

# Autoconnect databases at startup

If this option is selected, connection to the registered databases is established automatically at startup.

#### Queries with explain plan

If this option is checked, the <u>Query Plan</u> tab is displayed automatically within the **Results** tab upon a query execution.

#### Query results on separate tab

If this option is checked, the **Results** tab is displayed as a separate tab.

## Encrypted passwords

Encrypts passwords for connecting to databases stored in Windows Registry.

#### History Use history

Check this option to save the <u>history</u> of all edited queries and set the number of queries to be saved in the **History depth** box.

# Show history for current query only

Check this option to display the whole query history, or uncheck it to display the history for the current query only.

#### **SQL timeout**

# 🗹 SQL timeout

Check this option to set a value of SQL timeout different from '0' which is used by default.

See also: <u>Confirmations</u> <u>DB Explorer</u> <u>Query Builder</u> <u>Fonts</u> <u>Grid</u> <u>Report</u> Localization

# **Default Sheet**

Define what Query Builder tab should be active when creating/opening queries: *Edit*, *Query Builder*, *History*, *Favorites*.

Environment Options			x
Preferences	Default Sheet		
Default Sheet	Default sheet		
B DB Explorer	Edit	History	
🗉 🔛 Query Builder	Ouepy Builder	<ul> <li>Enviration</li> </ul>	
TI Fonts		() Pavonies	
Report			
Localization			

#### See also:

Preferences

# Confirmations

# Confirm exit from SQL Query for SQL Server

If this option is set, you are prompted for confirmation each time when you exit the application.

## Confirm commit transaction

If this option is checked, the application requires confirmation each time you commit a transaction.

Environment Options	
Environment Options   Preferences  Confirmations  DB Explorer  Query Builder  Fonts  Grid  Report Localization	Confirmations Confirm egit from SQL Query for SQL Server C Confirm commit transaction C Confirm rollback transaction C Confirm delete records
	<u>O</u> K <u>C</u> ancel <u>H</u> elp

## Confirm rollback transaction

If this option is on, you are prompted to confirm transaction rollback.

# Confirm delete records

If this option is selected, the program prompts you for confirmation of deleting records.

See also: <u>Preferences</u> <u>DB Explorer</u> <u>Query Builder</u> <u>Fonts</u> <u>Grid</u> <u>Report</u> <u>Localization</u>

# **DB Explorer**

#### **DB Explorer**

## Show hosts in DB Explorer

This option shows/hides database hosts in the <u>DB Explorer</u> tree.

# Show history in DB Explorer

This option shows/hides the <u>query history</u> node in the <u>DB Explorer</u> tree.

# Show hints

This option allows you to view the text of SQL queries in the <u>DB Explorer</u> tree as hints.

Environment Options	
Preferences	DB Explorer
Confirmations	DB Explorer
Query Builder	Show hosts in DB Explorer
TI Fonts	Show history in DB Explorer
Grid	Show hints
Report	Show fields comments in the SQL Assistant
	Show select procedures only
	UDF Details in SQL Assistant
	Input parameters
	Output parameters
	Input and Output parameters

#### Show fields comments in the SQL Assistant

This option allows you to view the comments in SQL Assistant in the <u>DB Explorer</u> tree.

#### Show select procedures only

This option allows you to display only select procedures in the <u>DB Explorer</u> tree.

#### **UDF Details in SQL Assistant**

Specify which details of SQL Server User Defined Functions are to be displayed in the <u>DB</u> <u>Explorer</u> tree: *Input parameters*, *Output parameters*, or both.

#### See also:

Preferences Confirmations Query Builder Fonts Grid Report Localization

# **Query Builder**

#### **General options**

#### Select condition row

Displays the selected condition in different rows within the <u>Criteria</u> and <u>Grouping criteria</u> tabs of <u>Visual Query Builder</u>.

#### Drag field name

Displays the dragged field name in the Builder area.

#### Hide selection when inactive

Hides the current selection when <u>Visual Query Builder</u> is inactive.

#### Show field types in hints

Displays field types next to the field names in the table box.

## Clear condition on query type changing

Check this option to clear the condition when the query type is changed. Otherwise it will be saved, and you can therefore use your condition for the UPDATE statement in the next SELECT statement to view the updated data.

#### **Visible tabs**

These options specify which <u>Visual Query Builder</u> tabs are available and which are not. Check the boxes to make the corresponding tabs visible.

#### **Script format**

These options specify the case formatting of keywords and functions in the query text within the **Edit** tab: *As is* keeps the original case, *Uppercase* sets all the keywords/ functions to the upper case, *Lowercase* sets all the keywords/functions to the lower case, and *First upper* sets the first letters of all keywords/functions to the upper case.

Environment Options				×
Confirmations     Confirmations     DB Explorer     Color Palette     Grid     Report     Localization	Query Builder General options Select condition row Drag field name Hide selection when inactiv	2	Show field types in hin	ts ny type changing
	<ul> <li>Hide selection when inactive</li> <li>Visible tabs</li> <li>Criterions</li> <li>Selection</li> <li>Group criterion</li> <li>Sorting</li> <li>Data</li> </ul>		Script format Keywords format As is Functions format As is Always <u>b</u> racket conditions	
	Style Condition button style Object border kind Additional V XP tables style V Union all by default	Raise Raised	Flat obje     Flat obje     Flat obje     Only select     Use icons	ects ect's buttons mode
			<u>K</u> a	ncel <u>H</u> elp

# Style

These options specify the way various <u>Visual Query Builder</u> elements look: the **Condition button**: *Flat*, *3DLook*, *Raise*; **object borders**: *Bump*, *Etched*, *Raised*, *Sunken*. If necessary, you can also specify **flatness** for objects and buttons using the corresponding options.

## Additional

## **V** XP tables style

This option determines the appearance of non-client areas of tables in <u>Visual Query</u> <u>Builder</u>.

# Union all by default

With this option set, new union subqueries will be united with already existing subqueries by the UNION ALL clause, otherwise - by the UNION clause.

#### Only select mode

Check this option to disable building of the INSERT, UPDATE and DELETE statements.

# **Use icons**

With this option selected, you can see the icons next to the database objects in <u>Visual</u> <u>Query Builder</u>.

#### See also:

Preferences Confirmations DB Explorer Fonts Grid Report Localization

# **Color Palette**

These options define the colors of various <u>Visual Query Builder</u> elements: *active condition row, condition text, condition item text, table client area,* etc. Click an item to select a color for the corresponding element using the **Color** dialog where you can specify the required color from the palette.

Environment Options			×
Preferences     Confirmations     DB Explorer     Query Builder     Color Palette     Grid     Grid     Report     Localization	Color Palette Color palette Active condition row Condition text Condition item text Table client area Work space Operation Predicate	Active table caption Inactive table caption Field text Selected field text Field Group	
		<u>OK</u> <u>Cancel</u> <u>H</u> elp	

# **Color palette**

These options define the colors of various <u>Query Builder</u> elements.

Active condition row (at the Criteria and Grouping criteria tabs):

	All	of the following are met			
N	1.	HR.DEPARTMENT.DEPARTMENTID		=	HR.EMPLOYEE.DEPT ID
43	2.	HR.EMPLOYEE.IS ACTIVE = 1	1		

Condition text (at the Criteria and Grouping criteria tabs):



Condition item text (at the Criteria and Grouping criteria tabs):

<u>All</u> of the following are met	
1 HR.DEPARTMENT.DEPARTMENTID	= HR.EMPLOYEE.DEPT ID
2. HR.EMPLOYEE.IS ACTIVE = 1	

Table client area (in the diagram area):



*Work space* (in the <u>diagram area</u>):

S_ACTIVE			DEPT_PHONE
SALARY SALARY			DEPT_ROOM
DETAILS	IJ		DEPT_ADDRESS
DEPT_ID	┝┘	<u>ا</u>	
MANAGER_ID		6	

Operation (at the Criteria and Grouping criteria tabs):

<u>All</u>	of the following are met		
1.	HR.DEPARTMENT.DEPARTMENTID	=	HR.EMPLOYEE.DEPT ID
2.	HR.EMPLOYEE.IS ACTIVE	1	

Predicate (at the Criteria and Grouping criteria tabs when a subquery is used):



# Active table caption (in the diagram area):



Inactive table caption (in the diagram area):



Selected field text (in the diagram area):



Field (at the Criteria and Grouping criteria tabs):

All of the following are met	
1.     HR.DEPARTMENT DEPARTMENTID       2.     HR.EMPLOYEE.IS       ACTIVE     =	= <u>HR.EMPLOYEE.DEPT ID</u>

Group (at the Grouping criteria tab):



Click an item to select a color for the corresponding element using the **Color** dialog where you can specify the required color from the palette.

# See also:

Query Builder

# Fonts

## System font name

Defines the font used by SQL Query for SQL Server. Select the font name from the dropdown list of available system fonts.

Environment Options		×
🗄 🗹 Preferences	Fonts	
Confirmations	System font name	
Query Builder	The Arial Unicode MS	•
TI Fonts	System font size 8	
Grid	Sample Text 12345	
	<u>O</u> K <u>C</u> ancel <u>H</u> elp	

### System font size

Defines the font size used by SQL Query for SQL Server. Type in or use the spin editor to specify the required value.

The box below displays the sample text with the selected font applied.

## See also:

Preferences Confirmations DB Explorer Query Builder Grid

Report

**Localization** 

# Grid

# Colors

Options of this group allow you to set colors for basic <u>grid</u> elements. Use the ellipsis button to open the **Color** dialog allowing you to select the required color from the palette.

#### Grid

Defines the background color of the data grid.

#### Row

Defines the color of the selected row in the data grid.

#### Stripy

Defines the color of the odd rows (applied if the **Stripy grids** option is set).

#### **Display formats**

#### Integer fields

Defines the format for displaying SMALLINT, INTEGER and BIGINT fields.

#### **Float fields**

Defines the format for displaying FLOAT, DOUBLE and DECIMAL fields.

### DateTime fields

Defines the format for displaying DATETIME fields.

## **Date fields**

Defines the format for displaying DATE fields.

# **Time fields**

Defines the format for displaying TIME and TIMESTAMP fields.

Environment Options		<b>—</b>
Environment Options   Preferences  Confirmations  B DB Explorer  Query Builder  T Fonts  Grid  Cocalization	Grid         Colors         Grid         Row         Highlight         Stripy         Display formats         Integer fields         Float fields         Date Time fields         Time fields         Grid layout preference         Image: Save and restore layout	NULL values Text Null Font color Inactive Immediately Stripy grids Use Ctrl+Up to increase spin values Show editor immediately Enable auto search in grid Row multi-selection Show text fields as string Load all rows mode
	<ul> <li>Save and restore layout</li> <li>Autofit column width</li> </ul>	Max fields width (chars)     20       Min fields width (chars)     3
		OK <u>Cancel H</u> elp

# **NULL values**

# **Text** Defines the text that stands for NULL values in <u>grid</u>.

#### Font color

Defines the font color for displaying NULL values in the <u>grid</u>. Use the ellipsis button to open the **Color** dialog allowing you to select the required color from the palette.

# Options

# Stripy grids

Displays the odd grid rows in the colors specified by the **Stripy** option.

#### Use Ctrl+Up to increase spin values

Allows you to use the *Ctrl+Up* and the *Ctrl+Down* key combinations for editing the spin values (numeric field values).

#### Show editor immediately

Checking this option allows you to edit the cell value immediately after you click the cell.

#### Enable auto-search in grid

If this option is checked, the cursor is automatically forwarded to the closest match when you start typing.

#### Row multi-selection

With this option set, multiple rows can be selected in grid.

#### Load all rows mode

With this option off, the grid loads only a fixed number of data records into the memory. This option minimizes dataset loading time. Automatic sorting, filtering, summary calculations are not supported in this mode.

With this option on, the grid loads all records from the returned dataset. This option increases the grid performance by reloading only the modified data records during the update process. In this mode all features (automatic sorting, filtering and summary calculations) are available.

#### Query fetch all records

With this option set, all records are fetched upon a query execution.

#### Show text fields as string

If this option is checked, the text fields are viewed as ordinary strings. Otherwise they are displayed as BLOB fields.

#### Max fields width (chars)

Defines the maximum width of CHAR and VARCHAR fields displayed in the grid.

#### Min fields width (chars)

Defines the minimum width of CHAR and VARCHAR fields displayed in the grid.

# **Grid layout preferences**

#### Save and restore layout

Select the option to keep the original grid width.

# Autofit column width

Select option to shrink the <u>grid</u> columns so that the longest visible value fits the column width.

#### See also:

Preferences Confirmations DB Explorer Query Builder Fonts Report Localization

# Report

# **Default paper size**

Select the default paper size for printable reports created in SQL Query for SQL Server.

#### **Default page orientation**

Select the default page orientation for the reports.

Environment Options				<b>—</b> ×-
🗄 🗹 Preferences	Report			
Confirmations	Default paper size			
Query Builder	) Letter, 8 1/2 x 11"		A4, 210 x 297 mm	
Grid	C Legal, 8 1/2 x 14"		A3, 297 x 420 mm	
Report	Default page orientation			
	<ul> <li>Portrait</li> </ul>			
	C Landscape			
	Margins			
	Left margin (cm)	0,5	Right margin (cm)	0,5 💂
	Top margin (cm)	0,5	Bottom margin (cm)	0,5 📮
			<u>O</u> K <u>C</u> ancel	<u>H</u> elp

## **Margins**

Use the **Left**, **Right**, **Top**, **Bottom** spinner controls to specify the corresponding page margins for the output PDF file.

#### See also:

Preferences Confirmations DB Explorer Query Builder Fonts Grid Localization

# Localization

The **Localization** section of the **Environment Options** dialog is provided for managing the localization files of SQL Query for SQL Server.

Environment Options			
Preferences	Localization		
Confirmations	Default Directory		C:\Program Files\EMS\SQL Query for SQL Server\Lang
Query Builder     Fonts	Choose Program L	anguage	Default
Grid	Available Lang	juages	
	Language Name	Language File	
	Default	(none)	
	English	C:\Program Files\EM	S\SQL Query for SQL Server\Languages\english.Ing
	French	C:\Program Files\EM	S\SQL Query for SQL Server\Languages\french.ing
	German	C:\Program Files\EM	S\SQL Query for SQL Server\Languages\german.ing
	Russian Add Defaults	C:\Program Files\EM:	S\SQL Query for SQL Server\Languages\russian.lng
			OK <u>C</u> ancel <u>H</u> elp

You can create your own \*.*Ing* files similar to those available in the *%program\_directory %\Languages* folder, add them to the list of available languages and set the new language as the program interface language.

#### Available Languages

Lists all the languages available for localization and the corresponding \*.lng files. Doubleclick a language in the list to edit its name or the \*.lng file.

#### **Default Directory**

Specify the directory where the \*. Ing files are stored by default.

#### **Add Defaults**

This button is used for searching for \*. Ing files in the **Default directory** and adds all of

them to the list.

See also: Preferences Confirmations DB Explorer Query Builder Fonts Grid Report

# 4.1.2 Editor options

**Editor Options** allow you to set the parameters of viewing and editing SQL statements within the <u>SQL Editor</u> tool of the SQL Query application.

To open the **Editor Options** window, select the **Options | Editor Options...** main menu item, or use the **Editor Options** button on the main toolbar.

- General
- Display
- <u>Color</u>
- Quick code

#### See also:

Environment options Visual options

# General

# **Editor options**

# Auto indent

If this option is checked, each new indention is the same as in the previous line in  $\underline{SQL}$ <u>Editor</u>.

Indents and outdents are used in the process of text editing to make the source code easier to read.

## Insert mode

If this option is checked, the insert symbols mode is on by default.

#### Use syntax highlight

Enables syntax highlight in the editor area.

# Find text at cursor

If this option is checked, the **Text to find** field in the <u>Find Text</u> and the <u>Replace Text</u> dialog windows is automatically filled with the text the cursor is set over.

#### Show line numbers

If this option is checked, the line numbers are displayed in the <u>SQL editor area</u>.

# Use folding

Check this option to enable code folding feature of SQL Editor.

# **Use smart caret**

If this option is checked, the tab length is variable. After pressing the *Tab* key the cursor aligns with the nearest first (or last) position of the neighboring line.

Color Quick Code	General Editor options Auto indent Insert mode Use syntax highlight Find text at cursor Show line numbers Use folding V Use smart caret
	Tab stops 0 - Undo limit 50 - OK Cancel Help

# Tab stops

Defines the tab length used when <u>editing SQL text</u>.

# Undo limit

Defines the maximum number of changes that can be undone.

See also:
<u>Display</u>
<u>Color</u>
Quick code
## Display

## Margin and gutter

## Visible right margin

Makes the right text margin visible.

## Visible gutter

Makes the gutter visible in the editor window.

Editor Options	
General Display Color Quick Code	Display         Margin and gutter         Image: Visible right margin         Right margin:         Gutter width:         Image: Visible gutter         80         30
	Editor font: Size: Pr Courier New  Show only fixed-width fonts
	Sample Text 12345
	<u>O</u> K <u>C</u> ancel <u>H</u> elp

## **Right margin**

Defines the position of the right text margin in the editor window.

#### **Gutter width**

Defines the gutter width in the editor window.

#### Editor font, Size

Use these options to set the editor font and its size.

#### Show only fixed-width fonts

Check this option if you wish to select the **Editor font** from the list of fixed-width fonts.

The box below displays the *sample text* with the selected font applied.

See also: General Color Quick code

## Color

The **Color** section of the **Editor Options** dialog you can set the background colors and text attributes (**Bold**, *Italic*, <u>Underlined</u>) used by <u>the editor</u> to mark out different text fragments: *Default*, *Comments*, *Strings*, *SQL Keywords*, *Numbers*, *Wrong Symbols*, *Identifiers*, *Symbols*, *Selected Text*, etc.

Editor Options	
Editor Options General Display Color Quick Code	Color  Element: Comment String SQL Keyword Number Wrong Symbols Identifier Symbol Current Line Use defaults for Foreground Background Background Background CREATE TABLE table1 ( int_field INTEGER NOT NULL default 0, char_field CHAR (25) NOT NULL default ABC GO CREATE INDEX int field idx ON
	<pre></pre>
	<u>O</u> K <u>Cancel</u> <u>H</u> elp

Use the **Foreground color** control to open the **Color** dialog allowing you to select the required color from the palette. Click the **Background color** control to select the required color using the **Color** dialog or leave the default value (white) if no background color is necessary for the selected text fragment.

See also:			
<u>General</u>			
<u>Display</u>			
<u>Quick code</u>			

## **Quick code**

## **Automatic features**

## Code completion

If this option is checked, then on typing the first characters in <u>SQL Editor</u> you are offered several variants for the word completion as a popup list (an analogue of the *Code Insight* list in Delphi IDE). The code completion list popups after a delay defined by the **Delay** option.

## Delay (sec)

Using this option you can change the time interval the code completion list popups after.

Editor Options	
General Display Color Quick Code	Quick Code         Automatic features         Image: Code completion         Delay (sec):       1         Keyboard templates         Image: Auto launch keyboard templates         Quick code list options         Image: Sort by scope         Image: Sort by name
	<u>Q</u> K <u>C</u> ancel <u>H</u> elp

#### **Keyboard templates**

## Auto launch keyboard templates

Allows you to use keyboard templates for faster typing regularly used expressions (see <u>Keyboard templates</u>).

## **Quick code list options**

## Sort by scope / Sort by name

Switches sorting objects in the popup menu by name or by type (Table, View, etc.).

See also: General Display Color

## 4.1.3 Visual options

**Visual Options** allow you to customize the application interface style to your liking.

To open the **Visual Options** window, select the **Options | Visual Options...** main menu item, or use the **I Visual Options** button on the main toolbar.

Use the **Scheme name** box to select the interface scheme you would like to be applied: *MS Office 11 style, MS Office XP style, MS Office 2000 style, Windows XP native style* or *Classic style*.

It is also possible to create one's own interface scheme, if necessary:

- set your preferences within the available sections of the Visual options dialog (<u>Bars</u> and Menus, <u>Trees and Lists</u>, <u>Edit Controls</u>, <u>Check boxes</u>, <u>Buttons</u>, etc.);
- click the **Save as...** button;
- specify the new scheme name in the Save Visual Scheme dialog.

Save visual scheme	×
Scheme name	
New Scheme 1	
OK Cancel	

For your convenience the previews illustrating the changes are displayed in the **Sample Group** area of each section within the **Visual options** dialog.

## See also:

Environment options Editor options Keyboard templates Localization

## **Bars and Menus**

Use the **Bars and menus** section of the **Visual options** dialog to customize SQL Query *bars style, menus animation* and a number of general options concerning toolbars and menus.

Visual Options	×
Scheme name MS O	fice 11 style Save As Delete
Bars and menus	Bars and menus
Trees and lists Edit controls Check boxes Buttons Page controls Group boxes Splitters	Bar style       Menu animation         Office 11       None         Sunken border       ✓         Use F10 for menu       ✓         Show full menus after delay       ✓         Flat close buttons       ✓         Gray-scale disabled images
	Elle Help
	OK Cancel Help

#### Bar style

Use the drop-down list to select the painting style that will be applied to the bars: Standard Enhanced Flat XP native Office 11

**Note:** If the *XP native* style is selected, bars use the currently applied XP theme to paint themselves. However, if the currently installed operating system is not Windows XP or the Windows Classic theme is currently applied, bars will be painted using the *Enhanced* style.

## **Menu animation**

Use the drop-down list to specify the menu animation effects: *None* (no animation) *Random* (random choice: *Unfold*, *Slide*, *Fade*) *Unfold* (unfolding menus) *Slide* (sliding drop-down and popup menus) *Fade* (menus fade in when appearing)

#### Sunken border

If this option is enabled, the border of each dockable bar is drawn using sunken borders. Otherwise, no border is drawn around the dockable bar.

## **Use F10 for menu**

If this option is disabled, the application does not respond to the F10 key press events and the main menu will not will be called.

## Show full menus after delay

This option is available only if the **Menus show recently used commands first** option (available in the <u>Customize</u> dialog) is selected.

If this option is enabled, infrequently used menu items (if they appear "collapsed") will be automatically expanded after a delay upon setting mouse cursor (or upon selection with the Up/Down keys) on the bottom of the menu. Otherwise, the menu expands only after clicking its bottom-most button (or using the Ctrl+Down shortcut).

#### Flat close buttons

This option determines the border style of the *Close* buttons. If this option is enabled, the Close button is drawn flat. Otherwise, it has a 3D look.

## Gray-scale disabled images

This option specifies whether default images must be painted faded. By default, images within disabled links are painted grayscale when the *XP native* or *Office11* **bar style** is used. For other **bar styles**, such images are painted grayed out. If this option is enabled, images of disabled links will be painted grayscale independently of the selected **bar style**.

## See also:

Trees and Lists Edit controls Check boxes Buttons Page controls Group boxes Splitters

## **Trees and Lists**

Use the **Trees and lists** section of the **Visual options** dialog to view and edit the corresponding options.

Visual Options					×
Scheme name MS O	ffice 11 style	•	Save As	Delete	
Bars and menus Trees and lists Edit controls Buttons Buttons Buttons Group boxes W Splitters	Trees and lists         Look & feel         Ultraflat <ul> <li>Hide selection</li> <li>Hide focus rectangle</li> <li>Native style</li> </ul>		Column 1 Sample1	Column 2 Sample2	
	]	<u>о</u> к		xel <u>H</u> elp	

## Look & feel

This setting determines the manner in which tree and list elements are painted. Use the drop-down list to select the painting style that will be applied to the trees and lists: *Standard* 

Flat UltraFlat

## Hide selection

This option specifies how selected tree nodes and list items are displayed when focus leaves the tree or list control.

If this option is enabled, selected nodes look like other nodes. Otherwise, selected nodes/ items are highlighted within the tree/list.

## Hide focus rectangle

This option determines whether a focus rectangle is displayed around the focused tree node or list item within the tree or list control.

If this option is disabled, the focused node/item is not highlighted but the focus rectangle is displayed around it.

## **Native style**

This option determines whether the native Windows style will be applied to the trees and lists.

The option has the highest priority for trees and lists. If this option is selected, the tree nodes and list items are painted according to the native Windows style, regardless of other painting settings.

**Note:** The **Native style** option is currently supported for the Windows® XP operating system only.

See also:	
Bars and Menus	
Edit controls	
Check boxes	
<u>Buttons</u>	
Page controls	
Group boxes	
<u>Splitters</u>	

## **Edit controls**

Use the **Edit controls** section of the **Visual options** dialog to customize the appearance of various SQL Query for SQL Server edit controls: *Border style*, *Button style*, *Button transparency*, etc.

Visual Options		<b>—</b>
Scheme name	MS Office 11 style Save As.	Delete
Bars and menu Crees and lists Check boxes Buttons Page controls Group boxes Splitters	nus ts Border style Ultraflat Button transparency None ♥ Hot track ♥ Hot track ♥ Shadow ♥ Native style Sample text edit Sample button edit	a
	Sample combo box 💌	<u>Cancel</u>

### **Border style / Button style**

Use these drop-down lists to specify the style around an editor (the edit control **borders**) and select the painting style that will be applied to the edit control **buttons** (ellipsis

button, arrow-down combo-box button, etc.) respectively: None Single Thick Flat 3D UltraFlat

#### **Button transparency**

Represents the button transparency mode within an editor. Use the drop-down list to specify the transparency that will be applied to the edit control **buttons** (ellipsis button, arrow-down combo-box button, etc.):

*None* (a button is always displayed in a non-transparent fashion)

*Inactive* (a button is drawn when the editor has focus or when the mouse cursor is positioned over the button; otherwise, the button is transparent)

Always (a button is always transparent)

*Hide inactive* (a button is drawn only when the editor has focus; otherwise, the button is invisible)

*Hide unselected* (a button is drawn when the editor has focus or when the mouse cursor is positioned over the editor region; otherwise, the button is invisible).

#### Edges

This group defines which edges are displayed within an editor. Check/uncheck the boxes to hide/show individual edges of the edit controls:

- Left (if unchecked, the left border edge is invisible)
- *Right* (if unchecked, the right border edge is invisible)
- Top (if unchecked, the top border edge is invisible)
- Bottom (if unchecked, the bottom border edge is invisible)

#### Hot track

This option specifies whether editor items are highlighted when the mouse cursor is positioned over an edit control. Select this option to highlight an edit control in response to mouse movements.

#### Shadow

If this option is selected, a shadow is displayed for the edit controls.

#### Native style

This option determines whether the native Windows style will be applied to the edit controls.

The option has the highest priority for edit controls. If this option is selected, the edit controls are painted according to the native Windows style, regardless of other painting settings.

**Note:** The **Native style** option is currently supported for the Windows® XP operating system only.

## See also:

Bars and Menus Trees and Lists Check boxes <u>Buttons</u> <u>Page controls</u> <u>Group boxes</u> <u>Splitters</u>

## **Check boxes**

Use the **Check boxes** section of the **Visual options** dialog to customize the *border style* and the appearance of *check boxes* and *radio buttons*.

Visual Options		<b>X</b>
Scheme name	MS Office 11 style	Save As Delete
Bars and men Trees and lists Edit controls Check boxes Buttons Page controls Group boxes I Splitters	us s Check boxes Border style Ultraflat Ultraflat I Hot track Shadow I Native style I Sample check box Sample radio button	Sample radio group Sample radio item 1 Sample radio item 2
		OK Cancel Help

#### **Border style**

This setting determines the manner in which check box and radio group borders are painted. Use the drop-down list to select the painting style that will be applied to the check boxes and radio groups:

None Single Thick Flat 3D UltraFlat

## Shadow

If this option is selected, a shadow is displayed for the check boxes and radio groups.

### **Native style**

This option determines whether the native Windows style will be applied to the check boxes and radio buttons.

The option has the highest priority for check boxes and radio buttons. If this option is selected, the check boxes and radio buttons are painted according to the native Windows style, regardless of other painting settings.

**Note:** The **Native style** option is currently supported for the Windows® XP operating system only.

# See also:

Bars and Menus Trees and Lists Edit controls Buttons Page controls Group boxes Splitters

## **Buttons**

Use the **Buttons** section of the **Visual options** dialog to customize SQL Query buttons.



#### **Button kind**

This setting determines the manner in which a button is painted. Use the drop-down list to select the painting style that will be applied to buttons: Standard Flat UltraFlat

## **Native style**

This option determines whether the native Windows style will be applied to the buttons. The option has a higher priority than the **Button kind** setting. If this option is selected, the buttons are painted according to the native Windows style, otherwise the **Button kind** selection is applied.

**Note:** The **Native style** option is currently supported for the Windows® XP operating system only.

See also: Bars and Menus Trees and Lists Edit controls Check boxes Page controls Group boxes

## **Splitters**

## Page controls

Use the **Page controls** section of the **Visual options** dialog to customize the style of all SQL Query *page controls*.

Visual Options	
Scheme name	MS Office 11 style   Save As  Delete
Bars and men Trees and lists Edit controls Check boxes Buttons Page controls Group boxes U Splitters	us S Tab style Ultraflat Hot track Multiline pages V Native style
	Tab 1 Tab 2 Tab 3
	OK Cancel Help

**Tabs** are visual elements of **tab controls**. Their purpose is to identify pages and switch between them. Once a tab is clicked, the corresponding page is selected.

**Pages** are container controls that represent the contents of tab controls. Tab controls contain a single page, whose context is to be updated each time the selected tab changes. **Page controls** contain the number of pages equal to the number of tabs.

#### Tab style

Use the drop-down list to select the painting style that will be applied to the tab controls: *Tabs* (tabs are painted as notebook tabs)

*Buttons* (the selected tab is painted as a pressed button, other tabs are painted as released buttons)

Flat (tabs are painted as notebook tabs, but appear lowered slightly)

#### Hot track

This option specifies whether tab captions are highlighted when the mouse pointer hovers over tabs. Select this option to enable tab highlighting.

## Multiline pages

This option specifies whether tabs are arranged across several rows.

If this option is enabled, tabs are automatically arranged into the minimum number of rows required to fit all of them. If this option is disabled, tabs are displayed within a single row.

## **Native style**

This option determines whether the native Windows style will be applied to the tab controls.

The option has the highest priority for the tab controls. If this option is selected, the tabs are painted according to the native Windows style, regardless of other painting settings.

**Note:** The **Native style** option is currently supported for the Windows® XP operating system only.

#### See also:

Bars and Menus Trees and Lists Edit controls Check boxes Buttons Group boxes Splitters

## Group boxes

Use the **Group boxes** section of the **Visual options** dialog to customize all SQL Query *group boxes* to your liking.

Visual Options	
Scheme name	MS Office 11 style Save As Delete
Bars and menu Trees and lists Edit controls Check boxes Buttons Page controls Group boxes	JS       Group boxes         Border style       Utraflat         □ Shadow       Image: Shadow         Image: Native style       Image: Native style         Sample group       Image: Sample check box 1         Image: Sample check box 2       Image: Sample check box 3
	<u>O</u> K <u>C</u> ancel <u>H</u> elp

#### **Border style**

This setting determines the manner in which group box borders are painted. Use the dropdown list to select the painting style that will be applied to the group boxes: *None* 

Single Thick Flat 3D UltraFlat

#### Shadow

If this option is selected, a shadow is displayed for the group boxes.

## **Native style**

This option determines whether the native Windows style will be applied to the group boxes.

The option has the highest priority for the group boxes. If this option is selected, the group boxes are painted according to the native Windows style, regardless of other painting settings.

**Note:** The **Native style** option is currently supported for the Windows® XP operating system only.

## See also: Bars and Menus Trees and Lists Edit controls Check boxes Buttons Page controls Splitters

## **Splitters**

Use the **Splitters** section of the **Visual options** dialog to customize all SQL Query *splitters* to your liking.

Visual Options	
Scheme name	MS Office 11 style Save As Delete
Bars and men Bars and list Edit controls Check boxes Buttons Page controls Group boxes Splitters	us s S Hot zone style Windows XP task bar   Hot zone drags a splitter
	OK Cancel Help

## Hot zone style

This setting determines the manner in which splitter hot zones are painted. Use the dropdown list to select the hot zone style that will be applied to the splitters: *Windows XP task bar Media Player 8 Media Player 9 Simple None* (hot zone is disabled)

#### Hot zone drags a splitter

This option is applied when the **Hot zone style** value is different from *None*, and specifies whether the splitter can be dragged by its hot zone.

If this option is enabled, you can drag the splitter by its hot zone (i.e. use any part of the splitter's area for dragging). Otherwise, attempts to drag the splitter by the hot zone will have no effect.

## See also:

Bars and Menus Trees and Lists Edit controls Check boxes Buttons Page controls Group boxes

## 4.1.4 Save Settings

**Save Settings Wizard** allows you to export the settings of SQL Query for SQL Server - wholly or partially - to a single \*.*reg* file which can be applied afterwards to SQL Query for SQL Server installed on another machine, or it can be used to backup previous settings.

To start the wizard, select the **Options | Save Settings** main menu item.

- Specifying destination file
- <u>Selecting settings</u>
- Selecting databases

#### See also:

Environment Options Editor Options Visual Options

## Specifying destination file

This step of the wizard allows you to specify the location of the destination file.



#### Filename

Use the **Save As..** button to set the path to the \*.*reg* file where the application settings are to be saved.

Press the **Next** button to proceed to the <u>next step</u> of the wizard.

## Selecting settings

This step of the wizard allows you to specify the information you need to be saved to the result file: Database registration info, Database projects, Tabs, Environment options, Editor options, Visual options, Keyboard templates, External tools list, Form placements, MRU lists.



Press the **Next** button to proceed to the <u>next step</u> of the wizard.

## **Selecting databases**

This step of the wizard allows you to select the database(s) to save the registration settings.



the **Selected databases** list. Use the **Non-Selected databases** list. Use the **Non-Selected databases** from one list to another.

Click the **Finish** button to start the extraction process.

165 SQL Query for SQL Server - User's Manual

## 4.2 Keyboard templates

The **Keyboard Templates** window allows you to create new keyboard templates for quicker typing regularly used expressions and to edit the existing ones.

Keyboard Template	5	
Acti Template	Add Template Edit Template Delete Template	Case of Templates  As is  Uppercase  Lowercase  Eirst upper
✓ /*	Add Template	
<b>√</b> //	Edit Template F2	
CT	Delete Template Del	Author <u>T</u> ime <u>D</u> ate
DEL	# = # - 1	
<ul> <li>✓ DT</li> <li>✓ IIS</li> <li>✓ IV</li> <li>✓ IV</li> <li>✓ SEL</li> <li>✓ SEL</li> <li>✓ TT</li> <li>✓ US</li> </ul>		E
UP		
		<u>O</u> K <u>C</u> ancel <u>H</u> elp

To open this window, select the **Options | Keyboard Templates...** main menu item, or use the **B Keyboard Templates** button on the main toolbar.

To add a new keyboard template, click the **Add Template...** button, set the template name and define the template expression. In the upper right area of the window you can change the **case** of the template expression.

You can deactivate an existing template by selecting it from the list on the left and removing the **Active** flag of the template.

If necessary, you can also edit the template name using the **Edit Template...** button, delete the template using the **Delete Template** button or edit the template expression within the **Expansion** area of the window. For faster editing you can use the *Cursor Position*, *Author*, *Time*, *Date* buttons.

## See also: Options Localization

166	SQL Query for SQL Server - User's Manual

## 4.3 Localization

When using **SQL Query for SQL Server**, your are provided with multi-language interface support. You can change the program language and specify the localization directories for your localization files easily.

- <u>Selecting program language</u>
- Setting localization directories

## See also:

<u>Options</u> <u>Keyboard templates</u>



## 5 Appendix

## 5.1 Customize toolbars and menus

The **Customize** dialog allows you to create and personalize SQL Query menus and toolbars.

To call this dialog, click the down-arrow button on the right side of any toolbar, then click **Add or Remove Buttons** and select **Customize...** from the drop-down menu. Alternatively, you can right-click any toolbar and select the **Customize...** popup menu item.



## **Toolbars**

#### Toolbars

This list displays all currently existing toolbars of SQL Query (both *default* and *user-defined* toolbars). Check/uncheck the box at a toolbar name to show/hide the toolbar.

#### New...

Use this button to add a new user-defined toolbar to the **Toolbars** list. Set a name for the newly created toolbar and dock it by dragging it to any permitted location within the application window.

#### Rename...

Use this button to rename the selected user-defined toolbar.

#### Delete

Use this button to delete the selected user-defined toolbar.

#### Reset...

Use this button to reset the selected toolbar.

Customize	<b>—</b> ×
Toolbars Commands Options	
Toolbars:	
Main Menu	<u>N</u> ew
Database     Options	R <u>e</u> name
Vindows DB Explorer	<u>D</u> elete
SQL Builder	<u>R</u> eset
Edit	
	Close

## Commands

This tab allows you to browse the list of all commands available within the menus and toolbars of the application window. Selecting categories in the **Categories** list displays commands of the selected category (e.g. 'Database' or 'Query') in the **Commands** list.

If necessary, you can pick a command and drag it to any toolbar to create a button for this command.

Customize	<b>—</b> ×-
Toolbars     Commands     Commands       Categories:       Database       View       Query       Options       Windows       Help       Menus       SQL Builder       History       Description	Options     Commands:      Register Database     Unregister Database     Database Registration Info     Connect to Database     Connect from Database     Disconnect from Database     Exit
	Close

#### **Options**

## **Personalized Menus and Toolbars**

## Menus show recently used commands first

This option determines whether the most frequently used items will be placed in menus at first position.

If this option is enabled, frequently used menu items are "promoted" and displayed higher on the list. Unused and infrequently used menu items are visually suppressed and appear "collapsed".

#### Show full menus after a short delay

This option is available only if the **Menus show recently used commands first** option is selected.

If this option is enabled, infrequently used menu items (if they appear "collapsed") will be automatically expanded after a delay upon setting mouse cursor (or upon selection with the Up/Down keys) on the bottom of the menu. Otherwise, the menu expands only after clicking its bottom-most button (or using the Ctrl+Down shortcut).

## Reset my usage data

Resets the lists of recently used commands in the toolbars and menus.

Customize 💽					
Toolbars Commands Options					
Personalized Menus and Toolbars					
Menus show recently used commands first					
Show f <u>ull</u> menus after a short delay					
<u>R</u> eset my usage data					
Other					
Show ToolTips on toolbars					
Show shortcut keys in ToolTips					
Menu animations: (None)					
Close					

## Other

## Large icons

This option displays larger icons on the parent window toolbars.

## Show ToolTips on toolbars

If this option is selected, ToolTips (hints) popup when the mouse cursor is positioned over a toolbar button.

## Show shortcut keys in ToolTips

If this option is selected, the corresponding shortcuts are displayed in ToolTips (hints) for toolbar buttons.

## Menu animations

Use the drop-down list to specify the menu animation effects: *None* (no animation) *Random* (random choice: *Unfold*, *Slide*, *Fade*) *Unfold* (unfolding menus) *Slide* (sliding menus) *Fade* (menus fade in when appearing)

# Credits

#### Software Developers:

Igor Petrov Alexey Butalov Alexander Zhiltsov Dmitry Schastlivtsev

## **Technical Writers:**

Semyon Slobodenyuk Dmitry Doni Olga Ryabova

## **Cover Designer:**

Tatyana Makurova

## Translators:

Anna Shulkina Serge Fominikh

## **Team Coordinators:**

Alexey Butalov Alexander Chelyadin Roman Tkachenko