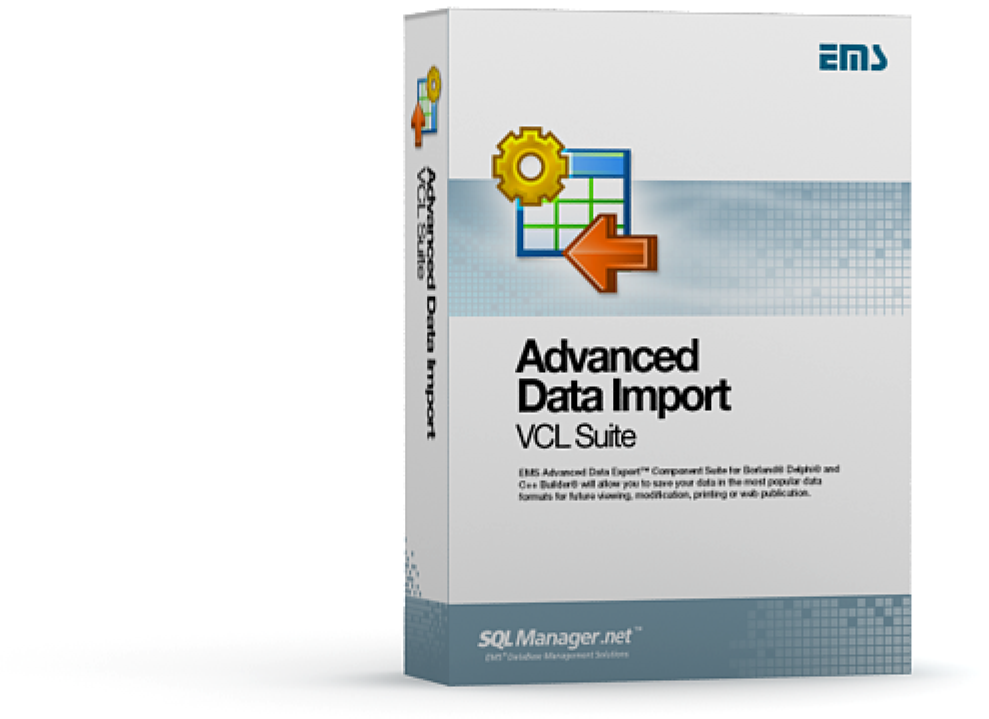

Advanced Data Import for RAD Studio VCL User's Manual

Advanced Data Import for RAD Studio VCL User's Manual

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Document generated on: 28/09/2021

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Part I

1 Welcome to Advanced Data Import for RAD Studio VCL!

1.1 Overview

EMS Advanced Data Import for RAD Studio VCL is a component that allows you to import data from files of the most popular data formats to the database. You can import data from MS Excel, MS Access, DBF, XML, TXT, CSV, ODF, and HTML. There will be no need to waste your time on tiresome data conversion - Advanced Data Import for RAD Studio VCL will do the task quickly, irrespective of the source data format.

Visit our web-site for details: http://www.sqlmanager.net/

Key features

- Data import from the most popular data formats: MS Excel, MS Access, DBF, XML, TXT, CSV, OpenDocument format (ODS, ODT), and HTML.
- Import of Unicode data (UTF-8, UTF-16/UCS-2, UTF-32/UCS-4). Automatic detection and manual preset of text encoding for imported data.
- Powerful component and property editors which admit to setting many import parameters at the design-time easily.
- High productivity even on slow computers.
- Adjustable parameters for each type of import.
- 100% native Delphi code for MS Excel, DBF, TXT, CSV - no additional libraries or programs needed for the components to work; OLE, DDE, BDE, etc. are not required either.
- Detailed help system and a demo application for quicker mastering the product.
- Delphi 5-7, 2005-2007, 2009, 2010, XE-XE8, 10 Seattle, 10.1 Berlin, 10.2 Tokyo, 10.3 Rio, 10.4 Sydney and C++ Builder 5-6, 2006-2007, 2009, 2010, XE-XE8, 10 Seattle, 10.1 Berlin, 10.2 Tokyo, 10.3 Rio, 10.4 Sydney, 11 Alexandria support.

Product information

Homepage	http://sqlmanager.net/products/tools/advancedimport
Support Ticket System	http://www.sqlmanager.net/support
Register on-line	http://sqlmanager.net/products/tools/advancedimport/buy

1.2 What's new

Version	**Release date**
Advanced Data Import for RAD Studio VCL 3.13	September 28, 2021

What's new in Advanced Data Import for RAD Studio VCL?

1. Support for RAD Studio 11 Alexandria implemented.
2. End of support for RAD Studio 2009 and older versions.
3. The Range out of bounds error fixed in TfmQImport3Editor editor on calling a Map... menu item.
4. Lines from CSV files were sometimes mixed up. Fixed now.
5. Encoding for XML package files added to the TQImport3Wizard dialog.
6. A ReadToEnd method added to the TQImport3Encoding class to read and encode large files at better performance.
7. Drawing issues occurred on vertical scrolling in TQImport3TXTViewer. Fixed now.
8. An error occurred when reading XML data packet with UTF-8-BOM encoding with TEncodedReadStream.ReadToEnd method. Fixed now.
9. XML Access parser improved to view data in a grid.
10. TQImport3ASCII in text mode did not correctly process control characters, such as TAB. Fixed now.
11. Images are now imported correctly from XML files.
12. Other fixes and improvements.

See also:

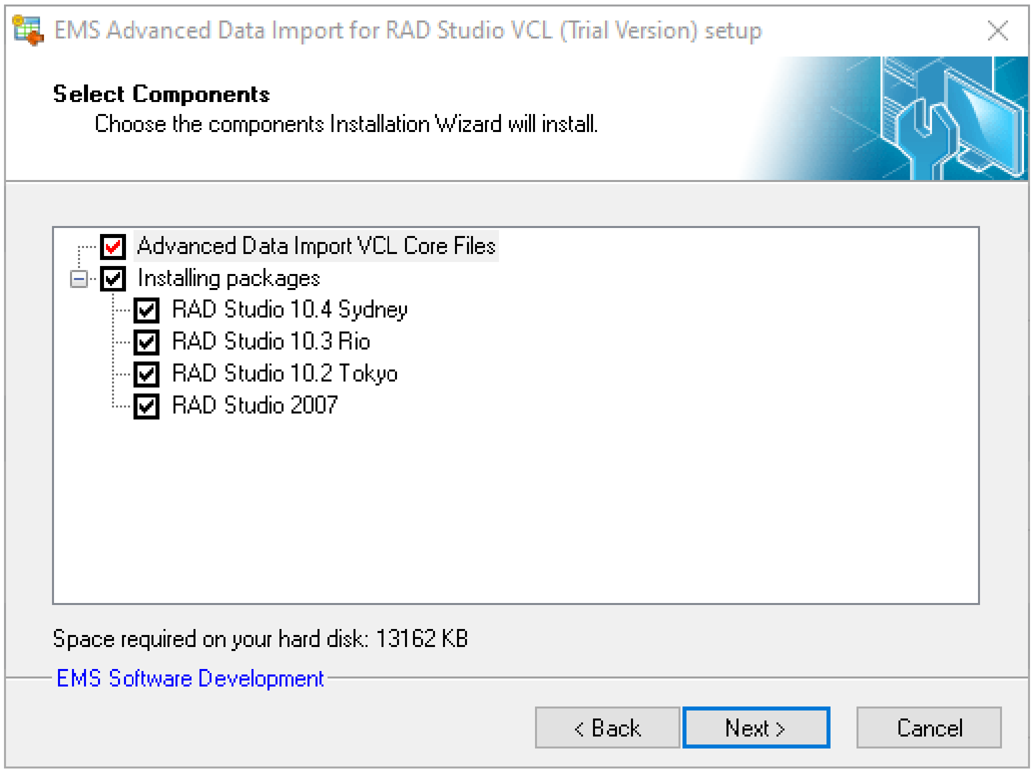
Version history

1.3 Installation

To install the **trial version** of **Advanced Data Import for RAD Studio VCL** onto your system:

- download the distribution package of **Advanced Data Import for RAD Studio VCL** from the download page available at our website;
- unzip the downloaded file to any local directory, e.g. *C:\unzipped*;
- close all currently opened Delphi and/or C++ Builder IDEs, if any;
- run the executable setup file from the local directory and follow the instructions of the installation wizard.

During the installation you will need to select the packages to install and set options that will take effect **only for installed IDE**:


EMS Advanced Data Import for RAD Studio VCL (Trial Version) setup
Select Components
Choose the components Installation Wizard will install.
EMS Software Development
< Back
Next >
Cancel

- [✓] Advanced Data Import VCL Core Files
- [✓] Installing packages
  - [✓] RAD Studio 10.4 Sydney
  - [✓] RAD Studio 10.3 Rio
  - [✓] RAD Studio 10.2 Tokyo
  - [✓] RAD Studio 2007

Space required on your hard disk: 13162 KB

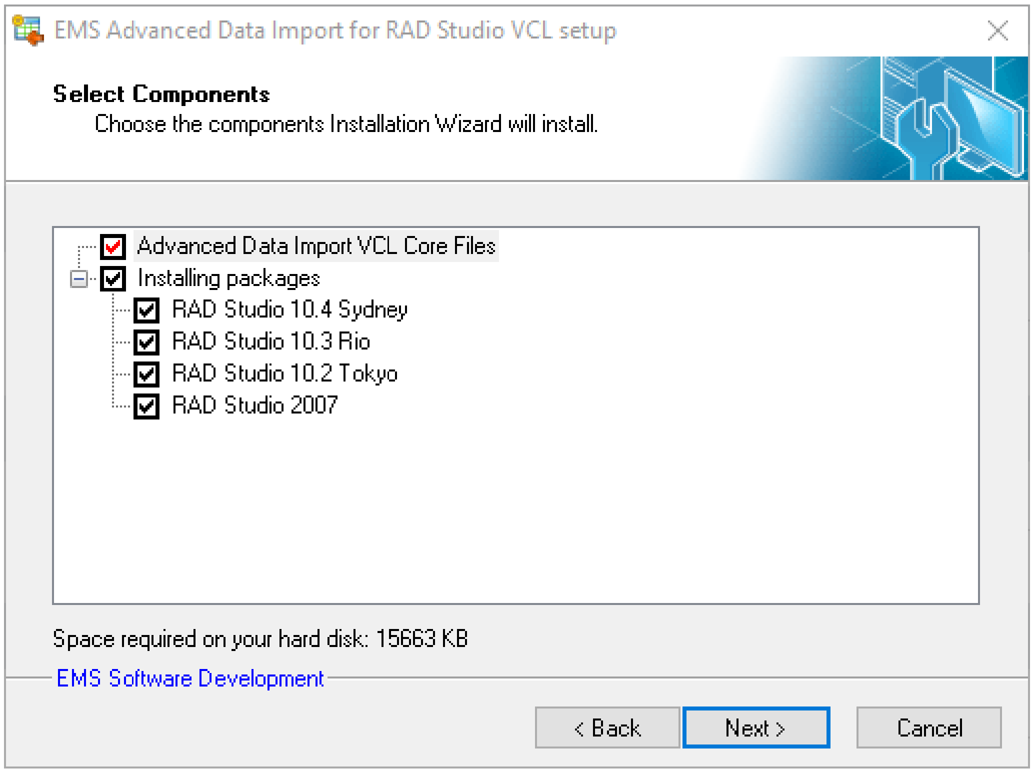
When you are done, you can finish installation of the **trial version** of **Advanced Data Import for RAD Studio VCL**.

To install the **full version** of **Advanced Data Import for RAD Studio VCL** onto your system:

- download the distribution package of **Advanced Data Import for RAD Studio VCL** from the download page available at our website;
- unzip the downloaded file to any local directory, e.g. *C:\unzipped*;
- close all currently opened Delphi and/or C++ Builder IDEs, if any;
- run the executable setup file from the local directory and follow the instructions of the installation wizard.

Enter valid registration information in the appropriate boxes: **Registration name** and **Registration Key**. See details on getting this information.

During the installation you will need to select the packages to install and set options that will take effect **only for installed IDE**:


EMS Advanced Data Import for RAD Studio VCL setup

Select Components
Choose the components Installation Wizard will install.

- [✓] Advanced Data Import VCL Core Files
- [✓] Installing packages
  - [✓] RAD Studio 10.4 Sydney
  - [✓] RAD Studio 10.3 Rio
  - [✓] RAD Studio 10.2 Tokyo
  - [✓] RAD Studio 2007

Space required on your hard disk: 15663 KB

EMS Software Development

When you are done, you can finish installation of the **full version** of **Advanced Data Import for RAD Studio VCL**.

Note: If the above given instructions have been insufficient for successful installation of the component suite, please refer to the `readme.1st` file distributed with the product.

1.4 Registration

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

Digital River 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, Check or Cash.

If you want to review your order information, or you have questions about ordering or payments please visit our Customer Care Center, provided by **Digital River.**

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 or passwords. Also you will receive a copy of registration keys or passwords 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	**MyCommerce/Digital River**
Advanced Data Import for RAD Studio VCL Full version (with sources) + 1-Year Maintenance*	Register Now!
Advanced Data Import for RAD Studio VCL Full version (with sources) + 2-Year Maintenance*	
Advanced Data Import for RAD Studio VCL Full version (with sources) + 3-Year Maintenance*	
Advanced Data Import for RAD Studio VCL 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.

1.5 How to register Advanced Data Import

To register your newly purchased copy of **EMS Advanced Data Import for RAD Studio VCL**, perform the following steps:

- receive the notification letter from **Digital River** with the registration info;
- enter the **Registration Name** and the **Registration Key** from this letter while installing the **full version** of the product.

See also:

Registration

1.6 Version history

Product name	Version	Release date
Advanced Data Import for RAD Studio VCL	**Version 3.12**	June 22, 2020
Advanced Data Import for RAD Studio VCL	**Version 3.11**	December 13, 2018
Advanced Data Import for RAD Studio VCL	**Version 3.10.1**	April 20, 2017
Advanced Data Import for RAD Studio VCL	**Version 3.10**	March 7, 2016
Advanced Data Import for RAD Studio VCL	**Version 3.9.6**	May 17, 2016
Advanced Data Import for RAD Studio VCL	**Version 3.9.4**	June 5, 2015
Advanced Data Import for RAD Studio VCL	**Version 3.9.3**	April 8, 2015
Advanced Data Import for RAD Studio VCL	**Version 3.9.2**	October 3, 2014
Advanced Data Import for RAD Studio VCL	**Version 3.9**	October 29, 2013
Advanced Data Import for RAD Studio VCL	**Version 3.8**	May 16, 2013
Advanced Data Import for RAD Studio VCL	**Version 3.7**	October 12, 2012
Advanced Data Import for RAD Studio VCL	**Version 3.6**	March 30, 2012
Advanced Data Import for RAD Studio VCL	**Version 3.5**	December 15, 2011
Advanced Data Import for RAD Studio VCL	**Version 3.4**	October 10, 2011
Advanced Data Import for RAD Studio VCL	**Version 3.3**	November 11, 2010
Advanced Data Import for RAD Studio VCL	**Version 3.2**	December 11, 2009
Advanced Data Import for RAD Studio VCL	**Version 3.1**	January 19, 2009
Advanced Data Import for RAD Studio VCL	**Version 3.0**	November 19, 2007

Full version history is available at http://www.sqlmanager.net/products/tools/advancedimport/news

Version 3.12

1. Implemented support for RAD Studio 10.4 Sydney.
2. Improved preview for XLSX files in TQImport3Wizard component.
3. The error occurred on cross-mapping columns in XLSX. Fixed now.
4. The interface froze if the TQImport3Xlsx.SheetName property contained an erroneous sheet name. Fixed now.
5. Mapping was not always displayed correctly in TfmQImport3TXTEditor. Fixed now.
6. Now the TQImport3Xlsx.Execute method returns True on successful import and False if it fails.
7. The error occurred on using two digits for year format. Fixed now.
8. Fixed error of defining the end of data stream in TQImport3Xlsx.
9. XML files with empty tags were previewed incorrectly. Fixed now.
10. Row values in OnUserDefinedImport event handler were not processed correctly for DateTime columns. Fixed now.
11. Now XLSX file data can be imported even if it's opened in the MS Excel app.
12. Encoding for XML SOAP files was not defined correctly. Fixed now.
13. Other fixes and improvements.

Version 3.11

1. Implemented support for RAD Studio 10.3 Rio.
2. The OnImportCheckField event handler added to the TQImport3Wizard component.
3. Import into BLOB columns implemented.
4. New SAX XML parser implemented to improve processing of big files.
5. XLS. Import supports 1904 date system now.
6. The ColCount property of the TXlsxWorkSheet class is calculated correctly now.
7. Content of JScript editor was not saved to a template file. Fixed now.
8. JScript didn’t save mapping to a selected field. Fixed now.

9. Import settings were not saved if AutoSaveTemplate and CloseAfterImport properties were set to True. Fixed now.
10. Null values were not replaced correctly with custom values. Fixed now.
11. Now empty strings ('') are stored correctly in the configuration file.
12. Many other improvements and fixes.

Version 3.10.1

1. Support of RAD Studio 10.2 Tokyo added.
2. The possibility to set topics of help file in the TQExport4Dialog.HelpContext or TQExport4Dialog.HelpTopic properties added.
3. There were issues with TQImport3Wizard controls layout when large system fonts used. Fixed now.
4. Some data was not displayed at the 'Data Formats' tab of the TQImport3Wizard dialog after loading template. Fixed now.
5. Some other small bug fixes.

Version 3.10

1. Support for 64-bit Windows target platform has been added.
2. Drag-and-drop for fields mapping has been implemented.
3. Processing of big XLSX, DOCX, ODS and ODT files has been cosiderably improved.
4. Possibility of importing the latest MS Access file versions has been added.
5. Now it's possible to import data from XLSX files containing unicode symbols in names.
6. HelpFile property has been added to the TQImport3Wizard component. It allows assigning a custom help file name for the application using TQImport3Wizard component.
7. Added possibility to set the import format automatically in the TQImport3Wizard component after loading the import file.
8. The biMinimize and biMaximize border icons have been added to the TQImport3WizardF form.
9. When the AutoLoadTemplate property is set to True and the template file is loaded from code, the boolean values were not shown in Wizard editors. Fixed now.
10. TQImport3XLS and TQImport3Xlsx components were unable to read XLS and XLSX files with charts. Fixed now.
11. If the last column of CSV file contained no value the column didn't appear in the map dialog window. Fixed now.
12. If CSV file contained less than 20 rows the last row didn't appear in the map dialog window. Fixed now.
13. If CSV contained CRLF symbols data was not read correctly. Fixed now.
14. If the CloseAfterImport property was set to True it always closed the wizard independently of the ConfirmOnCancel property state. Fixed now.
15. If the 'Close wizard after import' option was enabled, the progress bar wasn't displayed. Fixed now.
16. Other minor improvements and bugfixes.

Version 3.9.6

1. Added support of RAD Studio 10.1 Berlin
2. The OnCancelSetFieldValue and OnSetFieldValueAction event handlers were added to cancel assigning of field values and support adding any code to control assigning of field values.
3. The ImportEmptyRows property couldn't be set in component wizard. Fixed now.
4. The resource file identifiers conflicted with the Report Builder by Digital Metaphors component suite. Fixed now.
5. Other minor bug-fixes and improvements.

Version 3.9.4

1. RAD Studio XE8 support added.

Version 3.9.3

1. Added support of RAD Studio XE7.
2. Now it is possible to hide invisible fields of the binded Dataset or DBGrid in component editors. "SkipInvisibleColumns" property was implemented in TQImport3 class.
3. Now it is possible to hide invisible fields of the binded dataset or DBGrid in TQImport3Wizard component. "SkipInvisibleColumns" property was implemented in TQImport3Wizard class.
4. Now the active import component is passed as "Sender" parameter into some TQImport3Wizard events that are triggered during import process. This should simplify obtaining extra info about import process in event handlers.
5. New error event "OnError" was added into import components. This event is triggered with exceptions on any stages of the import process and provides an info about the current stage as well as an error message text.
6. Some bug fixes.

Version 3.9.2

1. Added support of RAD Studio XE7.
2. Now it is possible to hide invisible fields of the binded Dataset or DBGrid in component editors. "SkipInvisibleColumns" property was implemented in TQImport3 class.
3. Now it is possible to hide invisible fields of the binded dataset or DBGrid in TQImport3Wizard component. "SkipInvisibleColumns" property was implemented in TQImport3Wizard class.
4. Now the active import component is passed as "Sender" parameter into some TQImport3Wizard events that are triggered during import process. This should simplify obtaining extra info about import process in event handlers.
5. New error event "OnError" was added into import components. This event is triggered with exceptions on any stages of the import process and provides an info about the current stage as well as an error message text.
6. Some bug fixes.

Version 3.9

1. Added support of RAD Studio XE5.
2. QImport3XML. Added import from MS Access XML format files.
3. Qimport3Docx. Added BLOB fields import.
4. Other improvements and bug fixes.

Version 3.8

1. Added support of Embarcadero RAD Studio XE4.
2. Each value of the imported field can be processed using expressions in MS JScript. To the TQImportFieldFormat class the TqiStrings Script property containing the script code is added. To the TQImport3 basic class the ScriptEngine property of TQImport3ScriptEngine type is added. This property contains a reference to the component that will execute a script. The TQImport3ScriptEngine is the basic type, it sets the program logic and located in the QImport3ScriptEngine.pas module. It inherited the TQImport3JscriptEngine class, which works with the TScriptControl object from the QImport3MSScriptControlTLB.pas module in the context of MS JScript. You can also write your successor of the TQImport3ScriptEngine class to implement random script syntax. For TQImport3JscriptEngine the scrip execution result corresponds to the last variable value. If you want to use a filed value in the script, you need to specify the

field name enclosed in percent signs -% in TQImportFieldFormat.Script. Below there is an example showing how to get a field value, convert it to number and increase on a numeric value of the current month:

3. `// FieldName means a filed name`
4. `R = %FieldName%;`
5. `var D = New Date();`
6. `k = parseInt(R) + D.getMonth() + 1;`
7. If a script for the field is set, it will have the highest priority in the field processing. I.e. the generator will not start, if it is set, etc.
8. Now, instead of the imported field value the following values can be substituted: current date, current time, current date and time, full name of the imported file, short name of the imported file. To the TQImportFieldFormat class the Functions property of TQImportFunctions = (ifNone, ifDate, ifTime, ifDateTime, ifLongFileName, ifShortFileName) type is added;
9. QImport3HTML. Data from the files was imported. Fixed now.
10. If format masks correspond to system masks, they were not saved in the dfm file. Fixed now.
11. QImport3Xlsx. The InlineStr cell values were not imported. Fixed now.
12. QImport3ASCII. Some errors occurred while working with CSV files. Fixed now.
13. Other improvements and bug fixes.

Version 3.7

1. Added support of RAD Studio XE3.
2. Reading multi-byte encoding files caused data corruption. Fixed now.
3. QImport3Xlsx. When importing some files, an Access Violation error occurred. Fixed now.
4. QImport3Xlsx. When reading data in cells containing non-printable characters, an error occurred. Fixed now.
5. QImport3Xlsx. The Date/Time datatypes were displayed incorrectly. Fixed now.
6. QImport3Wizard. Import from CSV. When setting a MAP property, file data contained line break characters in the field values were displayed incorrectly. Fixed now.
7. QImport3Wizard. When importing from CSV and TXT, incorrect default encoding applied. Fixed now.
8. QImport3Wizard. Import from TXT. When loading a template in the MAP property settings, values of the block position and size were reversed. Fixed now.
9. QImport3Wizard. Even if the import process is fully complete, ProgressBar did not show 100% completion for some types of import. Fixed now.
10. Other improvements and bugfixes.

Version 3.6

1. Added the "Functions" property (TQImportFunctions = (ifNone, ifDate, ifTime, ifDateTime, ifLongFileName, ifShortFileName) to the TQImportFieldFormat class. This property allows to replace the imported value to the corresponding current date, current time, current date and time, the full name of the imported file, the short name of the imported file.
2. QImport3Xlsx. Restored the compatibility with the old-format config-file.
3. QImport3Xlsx. When setting a custom data format for numbers, the date format was applied to the values. Fixed now.
4. ADO_QImport3Access. The Blob data were not imported. Fixed now.
5. QImport3Xlsx. The first empty cell caused stopping the data import from the column. Fixed now.
6. QImport3Xlsx. When specifying column X1 in the Map, the data were imported from column A1. Fixed now.
7. QImport3Xlsx. If the date data format did not match the system format, an error

occurred. Fixed now.
8. QImport3Xls. The absence of data in a column or in a row caused the error. Fixed now.
9. Other improvements and bugfixes.

Version 3.5

1. TQImport3XML. Unicode support is added.
2. TQImport3Xlsx. The parsing logic of the Map property has been changed, now it is possible to specify the following parameters:
   - range of cells in the row or column - A1-F1, B1-B12, C1-ROWFINISH, K4-COLFINISH;
   - sheet name - [Sheet2]B1-B6;
   - sheet number - [:3]D4-D9;
   - several cellsets for the same field - [Sheet2]C12-C2;[:1]A1-A8;
3. Added the AutoTrimValue property. When AutoTrimValue = True, the Trim function will be applied to each string value.
4. Added the ImportEmptyRows property. When ImportEmptyRows = False, the empty strings will not be imported
5. When importing from Excel 2003 a formula was calculated incorrectly. Fixed now.
6. TQImport3Wizard. Fractional numbers were always separated by a point, regional settings were discarded. Fixed now.
7. Importing from CSV format caused the program hang-up. Fixed now.
8. TQImport3Wizard. XML files were imported with empty strings. Fixed now.
9. TQImport3Wizard. Strings longer than 8 KB were displayed incorrectly. Fixed now.
10. TQImport3Wizard. Now it is possible to resize the window of the wizard.
11. Other improvements and bugfixes.

Version 3.4

- Added support of Embarcadero RAD Studio XE2.

Version 3.3

- The support of Embarcadero RAD Studio XE is added.
- When using the ASCII import type in RAD Studio 2010, strings were sometimes truncated. Fixed now.
- QImport3XLS. When dealing with a large number of records, the destructor of the TXLSFile class was executed for too long. Fixed now.
- QImport3Wizard. Added the possibility to select the encoding for the CSV import type.
- QImport3Wizard. When reading from a template file, the Encoding, SkipLines and Map properties were not set for the import into the TXT format. Fixed now.
- Dates of the "1.1.1900" format were imported incorrectly. Fixed now.
- Some other small improvements and bug fixes.

Version 3.2

- Support of RAD Studio 2010 is added
- Italian localization is added
- In the Import Data wizard it is now possible to define the encoding when importing from text files
- Added the saving/reading of configuration for the TADO_QImport3Access component
- Memory leaks are eliminated
- A problem occurred during the import from XLS files which contained Eastern languages characters. Fixed now
- Fixed errors occurred when importing to StringGrid
- Fixed errors occurred when reading formulas in XLS files
- Resolved the type naming conflict which occurred when compiling component

packages in C++ Builder
- If the number of fields in the source and destination files did not coincide, an error occurred when importing to ListView. Fixed now
- An error occurred in XLSX when the SheetName property had empty value. Fixed now
- Other minor improvements and bug-fixes

Version 3.1
- Support of RAD Studio 2009 is added
- Minor improvements and bug-fixes

Version 3.0
1. Six new data import components have been added:
   - TQImport3HTML component is intended for importing tables from HTML pages
   - TQImport3XMLDoc component is intended for importing generic XML files. The import from any XML file using XPath language and DataLocation (tlAttributes, tlSubNodes) is implemented
   - QImport3Xlsx component is intended for importing the MS Excel 2007 sheets
   - TQImport3Docx component is intended for importing the MS Word 2007 tables
   - TQImport3ODS component is intended for importing the OpenDocument Spreadsheet files (Open Document Format)
   - TQImport3ODT component is intended for importing the tables of the OpenDocument Text files (Open Document Format)
2. Unicode support: now you are able to import Unicode data (UTF-8, UTF-16/UCS-2, UTF-32/UCS-4)
3. With the new installer used, the components are installed and registered in Delphi / C++ Builder environment automatically
4. Support of BDS 2006, RAD Studio 2007, Delphi 2007 and C++ Builder 2007 is added
5. Memory usage and performance are improved; large files are imported significantly faster
6. Other minor improvements and bug-fixes

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See also:

What's new

1.7 Other EMS Products

Quick navigation

MySQL | Microsoft SQL Server | PostgreSQL | InterBase / FireBird | Oracle | IBM DB2 | Tools & components

MySQL

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!

SQL Manager for MySQL
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.

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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.

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

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.

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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!

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.

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.

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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.

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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!

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SQL Manager for DB2
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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
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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
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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.

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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.

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.

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Part II

2 Advanced Data Import Component

EMS Advanced Data Import for RAD Studio VCL represents a set of tools for importing data to any TDataset component from files in different formats, such as Microsoft Excel, Microsoft Access, DBF, XML, CSV, TXT, HTML, DOCX, ODT, ODS, XLSX, and XML Document.

From a programmer's point of view the component represents a homomorphic hierarchy of classes with the common ancestor TQImport3. Beside the basic properties, methods and events, some specific characteristics are included in descendant classes.

The TQImport3Wizard component allows you to define all the import settings and import your data to the dataset from Excel, DBF, XML, CSV and TXT files within a dialog window. Using TQImport3Wizard you can add all the functionality of **Advanced Data Import for RAD Studio VCL** to your application within a single line of code!

Advanced Data Import for RAD Studio VCL provides a collection of the following components:

Component	**Brief description**
TQImport3	Common data import component
TADO_QImport3Access	Provides data import from MS Access databases
TQImport3ASCII	Provides data import from CSV and TXT files
TQImport3DataSet	Provides data import from a TDataSet component.
TQImport3DBF	Provides data import from DBF files
TQImport3Docx	Provides data import from MS Word tables
TQImport3HTML	Intended for importing tables from HTML pages
TQImport3ODS	Provides data import from OpenDocument Spreadsheet files (Open Document format)
TQImport3ODT	Provides data import from the tables of OpenDocument Text files (Open Document format)
TQImport3Wizard	Provides a dialog window to define all the import settings
TADO_QImport3Wizard	Provides the same functionality as TQImport3Wizard component, including import from Access
TQImport3XLS	Provides data import from XLS files
TQImport3XLSx	Intended for importing the MS Excel sheets
TQImport3XML	Provides data import from XML files
TQImport3XMLDoc	Provides data import from generic XML files using XPath and DataLocation (tlAttributes, tlSubNodes)

2.1 TQImport3

2.1.1 TQImport3 Reference

Unit
QImport3

Description
The *TQImport3* class is a base class of the collection. Here the basic properties and events for all the descendant classes are determined, and so are the two basic methods - Execute - which is later overridden in each of the components, and Cancel.

2.1.2 Properties

▶ Run-time only 🔑 Key properties

	🔑	AddType
▶	🔑	Canceled
	🔑	CommitAfterDone
	🔑	CommitRecCount
	🔑	DataSet
	🔑	DBGrid
	🔑	ErrorLog
	🔑	ErrorLogFileName
▶	🔑	ErrorRecs
▶	🔑	Errors
	🔑	FieldFormats
▶	🔑	FileName
	🔑	Formats
	🔑	GridCaptionRow
	🔑	GridStartRow
	🔑	ImportDestination
▶	🔑	ImportedRecs
	🔑	ImportMode
	🔑	ImportRecCount
	🔑	KeyColumns
	🔑	LastAction
	🔑	ListView
	🔑	Map
	🔑	RewriteErrorLogFile
	🔑	ShowErrorLog
	🔑	StringGrid

2.1.2.1 AddType

```
type TQImportAddType = (qatAppend, qatInsert);

property AddType: TQImportAddType;
```

Description
The *AddType* property defines what statement - *Append* or *Insert* - is used when writing data to the ImportDestination. The default value is *qatInsert*.

2.1.2.2 AutoTrimValue

```
property AutoTrimValue: boolean;
```

Description

If property *AutoTrimValue* property is true Trim function is applied to all text data. The default value is false.

2.1.2.3 Canceled

```
property Canceled: boolean;
```

Description
The *Canceled* property is read-only and it indicates if the import process was canceled during its execution. When import is started this property is false, but if import is canceled before the completion, this property becomes true.

See also:
OnImportCancel event
Cancel method

2.1.2.4 CommitAfterDone

```
property CommitAfterDone: boolean;
```

Description
If the *CommitAfterDone* property is *true* then the OnNeedCommit event takes place after import is finished.

See also:
CommitRecCount property
OnNeedCommit event

2.1.2.5 CommitRecCount

```
property CommitRecCount: integer;
```

Description
The *CommitRecCount* property defines the number of records, after importing which the OnNeedCommit event takes place.

See also:
CommitAfterDone property
OnNeedCommit event

2.1.2.6 DataSet

```
property DataSet: TDataSet;
```

Description
The *DataSet* property points to the target TDataSet component to import data to. To use a DataSet instance as import destination, you should set the ImportDestination property to qidDataSet (default) and the dataset which must be opened (Dataset.Active = true) before the import begins (before the Execute method is invoked).

See also:
ImportDestination property
DBGrid property
ListView property
StringGrid property
Execute method

2.1.2.7 DBGrid

```
**property** DBGrid: TDBGrid;
```

Description
The *DBGrid* property points to the target TDBGrid component to import data to. To use a DBGrid instance as import destination, you should set the ImportDestination property to qidDBGrid.

See also:
ImportDestination property
DataSet property
ListView property
StringGrid property

2.1.2.8 ErrorLog

```
property ErrorLog: boolean;
```

Description
If the *ErrorLog* property is true then all the error messages arisen during the import process will be added as string values to the Errors property.

See also:
ErrorRecs property
Errors property
OnImportError event
RewriteErrorLogFile

2.1.2.9 ErrorLogFileName

```
property ErrorLogFileName: string;
```

Description
The *ErrorLogFileName* property defines the name of the file to store messages of all the errors occurred during import process. It is used only if the ErrorLog property is *True*.

See also:
ErrorLog property
Errors property
ShowErrorLog property
RewriteErrorLogFile

2.1.2.10 ErrorRecs

```
property ErrorRecs: integer;
```

Description
The *ErrorRecs* property is read-only and indicates the number of errors that occurred during the import process.

See also:
ErrorLog property
Errors property
OnImportError event

2.1.2.11 Errors

```
property Errors: TStrings;
```

Description
The *Errors* property is read-only and it stores all the error messages arisen during the import process. It is used only if the property ErrorLog is true, otherwise it will always be empty.

See also:
ErrorLog property
ErrorRecs property
OnImportError

2.1.2.12 FieldFormats

```
property Formats: TQImportFieldFormats;
```

Description
The complex property *FieldFormats* is used in all the descendant components and determines the data formats of each imported field.

See also:
TQImportFieldFormats object

2.1.2.13 FileName

```
property FileName: string;
```

Description
The *FileName* property is used in all the *TQImport3* descendant components and determines the name of the file to import data from. This property must not be empty!

See also:
DataSet property
Execute method

2.1.2.14 Formats

```
property Formats: TQImportFormats;
```

Description
The complex property *Formats* is used in all the descendant components and determines the type of the imported data.

See also:
TQImportFormats object

2.1.2.15 GridCaptionRow

```
property GridCaptionRow: integer;
```

Description
The *GridCaptionRow* property is used only if ImportDestination is *qidStringGrid*. It allows you to set the column captions instead of numbers in the Map property and defines the row in the target *StringGrid* to take captions from.

See also:
GridStartRow property
DBGrid property

2.1.2.16 GridStartRow

```
property GridStartRow: integer;
```

Description
The *GridStartRow* property is used only if ImportDestination is *qidStringGrid*. It defines the row number in the target StringGrid to start import from. The default value is -1, it means that new rows are added to the end of StringGrid when import begins.

See also:
GridCaptionRow property
DBGrid property

2.1.2.17 ImportDestination

```
type TQImportDestination = (qidDataSet, qidDBGrid, qidListView, qidStringGrid, qidUse
```

```
property ImportDestination: TQImportDestination;
```

Description
The *ImportDestination* property defines the type of the target object to import data to: TDataSet, TDBGrid, TListView or TStringGrid. Depending on the value of this property, one of the following properties are used for defining the target object: DataSet, DBGrid, ListView or StringGrid. If you set the property value to qidUserDefined then you should process the imported value yourself using the OnUserDefinedImport event.

See also:
DataSet property
DBGrid property
ListView property
StringGrid property

2.1.2.18 ImportedRecs

```
property ImportedRecs: integer;
```

Description

The *ImportedRecs* property is read-only and it indicates the number of records successfully imported to the dataset.

See also:

ImportRecCount property

OnImportRecord event

2.1.2.19 ImportMode

```
type TQImportMode = (qimInsertAll, qimInsertNew, qimUpdate, qimUpdateOrInsert, qimDele
```

```
property ImportMode: TQImportMode;
```

Description
The *ImportMode* property allows you to define actions executed while importing data. The following values are available:

qimInsertAll	Inserts all the records from the source file to the target object
qimInsertNew	Inserts records which are not in the target object yet, others are skipped
qimUpdate	Updates those records which already exist in the target object, others are skipped
qimUpdateOrInsert	Updates existing records and inserts new records
qimDelete	Deletes those records which already exist in the target object, others are skipped
qimDeleteOrInsert	Deletes existing records and inserts new records

Note that for all of these modes, except InsertAll, you should define the KeyColumns property for defining the columns to search by.

See also:
KeyColumns property
ImportDestination property

2.1.2.20 ImportRecCount

```
property ImportRecCount: integer;
```

Description

The *ImportRecCount* property defines the number of records to import to the dataset. If its value is 0 then all the records will be imported, otherwise only the defined number of records will be imported.

See also:

ImportedRecs property

OnImportRecord event

2.1.2.21 KeyColumns

```
property KeyColumns: TStrings;
```

Description
The *KeyColumns* property is used if the ImportMode property is different from *qimInsertAll*. It defines columns which must be unique for searching the existing records in the target object.

See also:
ImportMode property

2.1.2.22 LastAction

```
type TQImportAction = (qiaNone, qiaInsert, qiaUpdate, qiaDelete);

property LastAction: TQImportAction;
```

Description

Read *LastAction* to get the last import action - *Insert*, *Update* or *Delete*, which depends on the ImportMode property value and on whether the duplicate value was met or not in the import destination (ImportDestination property).

You can use this property in OnAfterPost event, for example, for creating import logs.

See also:

ImportMode property

OnAfterPost event

2.1.2.23 ListView

```
property ListView: TListView;
```

Description
The *ListView* property points to the target *TListView* component to import data to. To use a ListView instance as import destination, you should set the ImportDestination property to qidListView.

See also:
ImportDestination property
DataSet property
DBGrid property
StringGrid property

2.1.2.24 Map

```
property Map: TStrings;
```

Description
The *Map* property is used in all the *TQImport3* descendant components and it sets the correspondence between the dataset fields and the imported table fields. It has its own implementation for each component.

See TQImport3DBF: Map, TQImport3XLS: Map, and TQImport3ASCII: Map.

See also:
TQImport3DBF: Map
TQImport3XLS: Map
TQImport3ASCII: Map

2.1.2.25 RewriteErrorLogFile

```
property RewriteErrorLogFile: boolean;
```

Description

The *RewriteErrorLogFile* property defines whether the existing error log file defined by the ErrorLogFileName property, should be overwritten during import or not.

See also:

ErrorLogFileName
ErrorLog
ShowErrorLog

2.1.2.26 ShowErrorLog

```
property ShowErrorLog: boolean;
```

Description
If property *ShowErrorLog* is true then all the import error messages are shown on screen after the import is finished.

See also:
ErrorLog property
ErrorLogFileName property
Errors property
RewriteErrorLogFile

2.1.2.27 StringGrid

```
property StringGrid: TStringGrid;
```

Description
The *StringGrid* property points to the target *TStringGrid* component to import data to. To use a *StringGrid* instance as import destination, you should set the ImportDestination property to *qidStringGrid*.

See also:
ImportDestination property
DataSet property
DBGrid property
ListView property

2.1.3 Methods

Key methods

- Cancel
- Execute
- ImportToCSV
- LoadConfiguration
- SaveConfiguration

2.1.3.1 Cancel

```
procedure Cancel;
```

Description
The *Cancel* method stops the current import process initiated by the Execute method invocation. At the same time, the OnImportCancel event takes place.

See also:
Canceled property
Execute method
OnImportCancel event

2.1.3.2 Execute

```
function Execute: boolean;
```

Description
The `Execute` method is the central method of the collection. It executes the data import from the source file to the DataSet. Of course, for each descendant class the method is defined in its own way, but the logics of the work remains the same for all the components. In case of the invocation, the function checks if the FileName and DataSet properties settings are correct; in case of an error, the exceptions are raised and the method stops being executed, returning false as a result. If all the required properties are set correctly, the method starts its work with generating the OnBeforeImport event. After it, the data import to the dataset is started, and after the importing each record the event OnImportRecord takes place. On completion of the process, the event OnAfterImport is invoked. The import process can be interrupted by Cancel method invocation, in this case the OnImportCancel event is invoked.

See also:
Cancel method
DataSet property
FileName property
OnBeforeImport event

2.1.3.3 ImportToCSV

```
procedure ImportToCSV(Stream: TStream; Comma, Quote: Char);
```

Description

The *ImportToCSV* method executes import to the given stream.The imported data are formatted as CSV, using the parameters ListSeparator and Quote, and then are written to the Stream. If Quote is the #0 character, then no quotes are used.

2.1.3.4 LoadConfiguration

```
procedure LoadConfiguration(const FileName: string);
```

Description
The *LoadConfiguration* method allows you to load all the component property values (FileName, Map, Formats, etc.) from the text file, specified by FileName.

See also:
SaveConfiguration method

2.1.3.5 SaveConfiguration

```
procedure SaveConfiguration(const FileName: string);
```

Description
The *SaveConfiguration* method allows you to save all the component property values (FileName, Map, Formats, etc.) to the text file specified by *FileName*.

See also:
LoadConfiguration method

2.1.4 Events

Key events

- OnAfterImport
- OnAfterPost
- OnBeforeImport
- OnBeforePost
- OnDestinationLocate
- OnImportCancel
- OnImportError
- OnImportRecord
- OnNeedCommit
- OnUserDefinedImport

2.1.4.1 OnAfterImport

```
property OnAfterImport: TNotifyEvent;
```

Description
The *OnAfterImport* event takes place when the import is complete or it was interrupted by the Cancel method.

See also:
OnBeforeImport event
Cancel method

2.1.4.2 OnAfterPost

```
type TImportAfterPostEvent = procedure(Sender: TObject; Row: TQImportRow); of object;

property OnAfterPost: TImportAfterPostEvent;
```

Description
The *OnAfterPost* event takes place after the imported value is posted to the ImportDestination object. Use this event to take any actions without changing the importing value, according to the Row parameter. You can also use the LastAction property value here.

See also:
OnBeforePost event
OnAfterImport event
TQImportRow object

2.1.4.3 OnBeforeImport

```
property OnBeforeImport: TNotifyEvent;
```

Description

The *OnBeforeImport* event takes place right before the import is started, i.e. when the Execute method is invoked.

See also:

OnAfterImport event

Execute method

2.1.4.4 OnBeforePost

```
type TImportBeforePostEvent = procedure(Sender: TObject; Row: TQImportRow; var Accept

property OnBeforePost: TImportBeforePostEvent;
```

Description
The *OnBeforePost* event takes place when the current table row is already delivered from the source table but not posted to the ImportDestination yet (if *ImportDestination* is not *qidUserDefined*). Row is the list containing of field names and values and allowing you to change the field value in the current row before it is posted. The *Accept* parameter defines if the current row is imported or not.

In the example below all the country names are imported in upper case and all the rows with population more than 10 000 000 are not imported at all.

```
procedure QImport1.BeforePost(Sender: TObject; Row: TQImportRow; var Accept: boolean)
var
  i: integer;
begin
  for i := 0 to Row.Count - 1 do begin
    if Row[i].Name = 'Country' then begin
      Row[i].Value := AnsiUpperCase(Row[i].Value);
      Continue;
    end;
    if (Row[i].Name = 'Population') and (StrToInt(Row[i].Value) > 10000000) then begi
       Accept := False;
       Break;
    end;
  end;
end;
```

See also:
OnAfterPost event
OnUserDefinedImport
OnBeforeImport event
TQImportRow object

2.1.4.5 OnDestinationLocate

```
type
  TDestinationLocateEvent = procedure(Sender: TObject; KeyColumns: TStrings; Row: TQIr
var KeyFields: string; var KeyValues: Variant) of object;

property OnDestinationLocate: TDestinationLocateEvent;
```

Description
If the ImportMode property has any value except *qimInsertAll*, and the ImportDestination property is set to *qidDataSet* or *qidDBGrid*, and it is necessary to find the record by *KeyColumns* values, then the *TDataSet.Locate* method is called. You can use the *OnDestinationLocate* event to customize the *TDataSet.Locate* method parameters, such as *KeyFields* and *KeyValues*.

See also:
ImportDestination property
ImportMode property

2.1.4.6 OnImportCancel

```
type TImportCancelEvent = procedure(Sender: TObject; var Continue: boolean); of object

property OnImportCancel: TImportCancelEvent;
```

Description

The *OnImportCancel* event takes place when the export process begun by the Execute method is interrupted by using the Cancel method invocation. Variable *Continue* defines whether the import process shall be stopped. If *Continue=False* then import will be aborted, otherwise it will be continued.

See also:
OnAfterImport event
Cancel method

2.1.4.7 OnImportError

```
property OnImportError: TNotifyEvent;
```

Description
The *OnImportError* event takes place when any error occurs during the import process.

See also:
ErrorLog property
ErrorRecs property
Errors property

2.1.4.8 OnImportRecord

```
property OnImportRecord: TNotifyEvent;
```

Description
The *OnImportRecord* event takes place after the importing data to each Dataset record. It is most frequently used to inform the user about the import execution process, e.g. to display the number of records exported, to increase the ProgressBar position, etc.

See also:
ImportRecs property
ImportRecCount

2.1.4.9 OnImportRowComplete

```
type TUserDefinedImportEvent = procedure(Sender: TObject; Row: TQImportRow); of objec

property OnImportRowComplete: TUserDefinedImportEvent;
```

Description
The *OnImportRowComplete* event takes place when the import of row is complete.

See also:
ImportRecs property
ImportRecCount

2.1.4.10 OnNeedCommit

```
property OnNeedCommit: TNotifyEvent;
```

Description

The *OnNeedCommit* event takes place after importing a number of records, defined in the CommitRecCount property, or when the import is finished, if the CommitAfterDone is true. If neither of these properties are defined, the *OnNeedCommit* event will never take place.

Note that you should process the event manually to commit writing data to the dataset.

See also:

CommitAfterDone property
CommitRecCount property

2.1.4.11 OnUserDefinedImport

```
type TUserDefinedImportEvent = procedure(Sender: TObject; Row: TQImportRow); of object

property OnUserDefinedImport: TUserDefinedImportEvent;
```

Description

The *OnUserDefinedImport* event takes place only if the ImportDestination property is *qidUserDefined*. It occurs each time the value is read from the source file and allows you to put the Row value to any destination you like.

See also:

TQImportRow object
OnBeforePost event

2.2 TADO_QImport3Access

2.2.1 TADO_QImport3Access Reference

Unit
QImport3Access

Description
The *TADO_QImport3Access* component is intended for importing data from the MS Access databases. Using the SourceType property you can receive data either from a table specified by the TableName property, or from the result of a query defined in the SQL property.

Note that *TADO_QImport3Access* installs only on Delphi 5 or higher, as it uses ADO.

2.2.2 Properties

▶ Run-time only 🔑 Key properties

	SkipFirstRows
🔑	SourceType
🔑	SQL
🔑	TableName

2.2.2.1 SkipFirstRows

```
property SkipFirstRows;
```

Description

The *SkipFirstRows* property defines the number of rows, counted from the first in the source table, which are not imported to the dataset. E.g. if you set SkipFirstRows=4 then the first four rows of the source Access table or query result are not imported.

2.2.2.2 SourceType

```
type TQImportAccessSourceType = (isTable, isSQL);

property SourceType: TQImportAccessSourceType;
```

Description
The *SourceType* property defines if data are imported from the Access table specified by the TableName property, or from the result of the query defined by the SQL property.

See also:
SQL property
TableName property

2.2.2.3 SQL

```
property SQL: TStrings;
```

Description
The *SQL* property sets the SQL text for the query to be executed which result is returned to the dataset. This property works only if SourceType is *isSQL*.

See also:
SourceType property
TableName property

2.2.2.4 TableName

```
property TableName: string;
```

Description

The *TableName* property defines the name of the Access table to import data from. This property works only if SourceType is *isTable*.

See also:

SourceType property

SQL property

2.3 TQImport3ASCII

2.3.1 TQImport3ASCII Reference

Unit
QImport3ASCII

Description
The *TQImport3ASCII* component is used to import data from files in formats usually used as working or interchange formats, i.e. Comma Separated Value (CSV) and Plain Text Format.

2.3.2 Properties

▸ Run-time only 🔑 Key properties

🔑	Comma
	CommitAfterDone
	CommitRecCount
	DataSet
🔑	Encoding
	FieldFormats
	FileName
	Formats
	ImportRecCount
🔑	Map
🔑	Quote
🔑	SkipFirstRows

2.3.2.1 Comma

```
property Comma: AnsiChar;
```

Description

The *Comma* property defines the character to be used as comma in the source table.

2.3.2.2 Encoding

```
property Encoding: TQICharsetType;
```

Description

The *Encoding* property defines the encoding to be used while importing to the dataset. By default, Windows encoding is used.

2.3.2.3 SkipFirstRows

```
property SkipFirstRows: integer;
```

Description
The *SkipFirstRows* property defines the number of records counted from the first in the source table which are not imported to the dataset. E.g. if you set SkipFirstRows=4 then the first four records of the source DBF table will not be imported.

2.3.2.4 Map

```
property Map: TStrings;
```

Description
Defining the *Map* property for the ASCII import depends on the type of the source table. If each column has its own fixed size then you should provide two integers for each dataset field: a position number (where column begins) and a column size.

E.g.
DataSet.FieldName1=4
or
DataSet.FieldName1=20;15.

See also:
Map property (TQImport3)

2.3.2.5 Quote

```
property Quote: AnsiChar;
```

Description
If the source data contains quoted characters, you should define the character used for quotation in the *Quote* property, e.g. '`'.

2.3.3 Events

Key events

OnAfterImport
OnBeforeImport
OnBeforePost
OnImportError
OnImportRecord
OnNeedCommit

2.4 TQImport3DataSet

2.4.1 TQImport3DataSet Reference

Unit
QImport3DataSet

Description
The *TQImport3DataSet* component is intended for moving data from one dataset defined by the Source property to the other one set as the DataSet property value.

2.4.2 Properties

▶ Run-time only 🔑 Key properties

🔑	GoToFirstRecord
🔑	SkipFirstRows
🔑	Source

2.4.2.1 GoToFirstRecord

```
property GoToFirstRecord: boolean;
```

Description
If GoToFirstRecord property is True, then import starts from the first record of the source dataset, otherwise from the current record.

2.4.2.2 SkipFirstRows

```
property SkipFirstRows;
```

Description
The SkipFirstRows property defines the number of rows, counted from the first in the source dataset, which are not imported to the dataset. E.g. if you set SkipFirstRows=4 then the first four rows of the source dataset are not imported.

2.4.2.3 Source

```
property Source: TDataSet;
```

Description

The Source property defines the source TDataSet component, import from which takes place.

2.5 TQImport3DBF

2.5.1 TQImport3DBF Reference

Unit
QImport3DBF

Description
The *TQImport3DBF* component allows you to import your data from the DBF files.

2.5.2 Properties

▸ Run-time only 🔑 Key properties

	CommitAfterDone
	CommitRecCount
	DataSet
	FieldFormats
	FileName
	Formats
	ImportRecCount
🔑	SkipDeleted
🔑	SkipFirstRows
🔑	Map

2.5.2.1 SkipDeleted

```
property SkipDeleted: boolean;
```

Description

If *SkipDeleted* is *true* (default), then all the records in the source DBF file marked as deleted are not imported to the target object.

2.5.2.2 SkipFirstRows

```
property SkipFirstRows: integer;
```

Description
The *SkipFirstRows* property defines the number of records, counted from the first in the source table, which are not imported to the dataset. E.g. if you set SkipFirstRows=4 then the first four records of the source DBF table will not be imported.

2.5.2.3 Map

```
property Map: TStrings;
```

Description
To set the correspondence between the dataset fields and the DBF table field you should define the *Map* property in the following way:
DataSet.FieldName1=TableFieldName1,
DataSetFieldName2=TableFieldName2, etc.

See also:
Map property (TQImport3)

2.5.3 Events

Key events

OnAfterImport
OnBeforeImport
OnBeforePost
OnImportError
OnImportRecord
OnNeedCommit

2.6 TQImport3Docx

2.6.1 TQImport3Docx Reference

Unit
QImport3Docx

Description
The *TQImport3Docx* component is intended for importing the MS Word 2007 files.

2.6.2 Properties

▶ Run-time only 🔑 Key properties

	CommitAfterDone
	CommitRecCount
	DataSet
	FieldFormats
	FileName
	Formats
🔑	NeedFillMerge
	ImportRecCount
🔑	Map
🔑	SkipFirstRows
🔑	TableNumber

2.6.2.1 Map

```
property Map: TStrings;
```

Description

To set the correspondence between the dataset fields and the Docx table column you should define the *Map* property in the following way:
DataSet.FieldName1=1,
DataSet.FieldName2=2, etc.

2.6.2.2 SkipFirstRows

```
property SkipFirstRows: integer;
```

Description
The *SkipFirstRows* property defines the number of records, counted from the first in the source table, which are not imported to the dataset. E.g. if you set SkipFirstRows=4 then the first four records of the source Docx table will not be imported.

2.6.2.3 NeedFillMerge

```
property NeedFillMerge: Boolean;
```

Description

The *NeedFillMerge* property defines whether the merged cells should be filled.

2.6.2.4 TableNumber

```
property TableNumber: integer;
```

Description

The *TableNumber* property sets the number of table to be imported.

2.6.3 Events

Key events

- OnAfterImport
- OnBeforeImport
- OnBeforePost
- OnImportError
- OnImportRecord
- OnNeedCommit

2.7 TQImport3HTML

2.7.1 TQImport3HTML Reference

Unit
QImport3HTML

Description
The *TQImport3HTML* component is used to import data from the tables contained in HTML files.

2.7.2 Properties

▶ Run-time only 🔑 Key properties

	CommitAfterDone
	CommitRecCount
	DataSet
🔑	TableNumber
	FieldFormats
	FileName
	Formats
	ImportRecCount
🔑	Map
🔑	SkipFirstRows

2.7.2.1 Map

```
property Map: TStrings;
```

Description
To set the correspondence between the dataset fields and the HTML table column you should define the Map property in the following way:
DataSet.FieldName1=1,
DataSet.FieldName2=2, etc.

2.7.2.2 SkipFirstRows

```
property SkipFirstRows: integer;
```

Description

The *SkipFirstRows* property defines the number of records, counted from the first in the source table, which are not imported to the dataset. E.g. if you set SkipFirstRows=4 then the first four records of the source HTML table will not be imported.

2.7.2.3 TableNumber

```
property TableNumber: integer;
```

Description

The *TableNumber* property defines the number of table in HTML document. E.g. if you set TableNumber=2 then the second table from the HTML document will be selected for import.

2.7.3 Events

Key events

OnAfterImport
OnBeforeImport
OnBeforePost
OnImportError
OnImportRecord
OnNeedCommit

2.8 TQImport3ODS

2.8.1 TQImport3ODS Reference

Unit
QImport3ODS

Description
The *TQImport3ODS* component is intended to import datafrom the OpenDocument Spreadsheet files.

2.8.2 Properties

▸ Run-time only 🔑 Key properties

	CommitAfterDone
	CommitRecCount
	DataSet
	FieldFormats
	FileName
	Formats
🔑	NotExpandMergedValue
	ImportRecCount
🔑	Map
🔑	SkipFirstRows
🔑	SheetName

2.8.2.1 Map

```
property Map: TStrings;
```

Description
To set the correspondence between the dataset fields and the OpenDocument Spreadsheet file column you should define the *Map* property in the following way:
DataSet.FieldName1=A,
DataSet.FieldName2=B, etc.

2.8.2.2 SkipFirstRows

```
property SkipFirstRows: integer;
```

Description
The *SkipFirstRows* property defines the number of records, counted from the first in the source table which are not imported to the dataset. E.g. if you set SkipFirstRows=4 then the first four records of the source ODS will not be imported.

2.8.2.3 SheetName

```
property SheetName: string;
```

Description

The *SheetName* property sets the name of the sheet.

2.8.2.4 NotExpandMergedValue

```
property NotExpandMergedValue: Boolean;
```

Description

The *NotExpandMergedValue* property defines whether the merged cell values should be spread (true by default, the merged cell values are not expanded).

2.8.3 Events

Key events

OnAfterImport
OnBeforeImport
OnBeforePost
OnImportError
OnImportRecord
OnNeedCommit

2.9 TQImport3ODT

2.9.1 TQImport3ODT Reference

Unit
QImport3ODT

Description
The *TQImport3ODT* component is intended for importing the OpenDocument Text files.

2.9.2 Properties

▶ Run-time only 🔑 Key properties

	CommitAfterDone
	CommitRecCount
	DataSet
	FieldFormats
	FileName
	Formats
	ImportRecCount
🔑	SheetName
🔑	UseComplexTables
🔑	SkipFirstRows
🔑	Map

2.9.2.1 Map

```
property Map: TStrings;
```

Description

To set the correspondence between the dataset fields and the OpenDocument Text table column you should define the *Map* property in the following way:
DataSet.FieldName1=A,
DataSet.FieldName2=B, etc.

2.9.2.2 SkipFirstRows

```
property SkipFirstRows: integer;
```

Description
The *SkipFirstRows* property defines the number of records, counted from the first in the source table which are not imported to the dataset. E.g. if you set SkipFirstRows=4 then the first four records of the source ODT table will not be imported.

2.9.2.3 SheetName

```
property SheetName: string;
```

Description

The *SheetName* property sets the name of the table.

2.9.2.4 UseComplexTables

```
property UseComplexTables: Boolean;
```

Description

The *UseComplexTables* property allows to import data from the ODT file table if it has a complex merged structure (when it can be parsed improperly).

2.9.3 Events

Key events

OnAfterImport
OnBeforeImport
OnBeforePost
OnImportError
OnImportRecord
OnNeedCommit

2.10 TQImport3Wizard

2.10.1 TQImport3Wizard Reference

Unit
QImport3Wizard

Description
The *TQImport3Wizard* component allows you to define all the import settings and import your data to the dataset from Excel, DBF, CSV, XML and TXT files within a dialog window. Using *TQImport3Wizard* you can add all the functionality of the *Advanced Data Import* components to your application within a single line of code!

2.10.2 Properties

▸ Run-time only 🔑 Key properties

- 🔑 AddType
- 🔑 AllowedImports
- 🔑 AutoChangeExtension
- 🔑 AutoLoadTemplate
- 🔑 AutoSaveTemplate
- 🔑 CloseAfterImport
- 🔑 CommitAfterDone
- 🔑 CommitRecCount
- 🔑 ConfirmOnCancel
- 🔑 CSVViewerRows
- 🔑 DataSet
- 🔑 DBGrid
- 🔑 ErrorLog
- 🔑 ErrorLogFileName
- 🔑 ExcelMaxColWidth
- 🔑 ExcelViewerRows
- 🔑 FieldFormats
- 🔑 FileName
- 🔑 Formats
- 🔑 GoToLastPageAfterLoadTemplate
- 🔑 GridCaptionRow
- 🔑 GridStartRow
- 🔑 ImportDestination
- 🔑 ImportMode
- 🔑 ImportRecCount
- 🔑 KeyColumns
- 🔑 ListView
- 🔑 Picture
- 🔑 RewriteErrorLogFile
- 🔑 ShowErrorLog
- 🔑 ShowHelpButton
- 🔑 ShowProgress
- 🔑 ShowSaveLoadButtons
- 🔑 StringGrid
- 🔑 TemplateFileName
- 🔑 TextViewerRows

2.10.2.1 AddType

```
type TQImportAddType = (qatAppend, qatInsert);

property AddType: TQImportAddType;
```

Description
The *AddType* property defines what statement - *Append* or *Insert* - is used when writing data to the ImportDestination. The default value is *qatInsert*.

2.10.2.2 AllowedImports

```
type TAllowedImport = (aiXLS, aiDBF, aiXML, aiTXT, aiCSV);
type TAllowedImports = set of TAllowedImport;

property AllowedImports: TAllowedImports;
```

Description

The *AllowedImports* property defines the import types available in the dialog window. Add or remove values from the property to enable or disable corresponding import types.

See also:

AutoChangeExtension property
FileName property

2.10.2.3 AutoChangeExtension

```
property AutoChangeExtension: boolean;
```

Description
If the *AutoChangeExtension* property is *true* then on choosing the import type in the dialog window the file extension will be changed automatically in the 'Source Filename' edit field.

See also:
AllowedImports property
FileName property

2.10.2.4 AutoLoadTemplate

```
property AutoLoadTemplate: boolean;
```

Description

If the *AutoLoadTemplate* property is *true*, then all the import settings are automatically load on starting wizard from the template file specified by the TemplateFileName property.

See also:
AutoSaveTemplate property
TemplateFileName property

2.10.2.5 AutoSaveTemplate

```
property AutoSaveTemplate: boolean;
```

Description

If the *AutoSaveTemplate* property is *true*, then all the import settings are automatically saved on wizard finish to the template file specified by the TemplateFileName property.

See also:

AutoLoadTemplate property

TemplateFileName property

2.10.2.6 CloseAfterImport

```
property CloseAfterImport: boolean;
```

Description
If the *CloseAfterImport* property is *True*, then the Wizard closes automatically after the import process is finished.

2.10.2.7 CommitAfterDone

```
property CommitAfterDone: boolean;
```

Description
If the *CommitAfterDone* property is *True* then the OnNeedCommit event takes place after the import finished.

See also:
CommitRecCount property
OnNeedCommit event

2.10.2.8 CommitRecCount

```
property CommitRecCount: integer;
```

Description
The *CommitRecCount* property defines the number of records after importing which the OnNeedCommit event takes place.

See also:
CommitAfterDone property
OnNeedCommit event

2.10.2.9 ConfirmOnCancel

```
property ConfirmOnCancel: boolean;
```

Description

The *ConfirmOnCancel* property defines whether user is asked for confirmation on trying to cancel import or not.

2.10.2.10 CSVViewerRows

```
property CSVViewerRows: integer;
```

Description
Use the *CSVViewerRows* property to define the number of the CSV file rows shown in the grid on the Step 1 of the wizard if import from CSV is selected.

See also:
ExcelViewerRows property
TextViewerRows property

2.10.2.11 DataSet

```
property DataSet: TDataSet;
```

Description
The *DataSet* property points to the target TDataSet component to import data to. To use a DataSet instance as import destination, you should set the ImportDestination property to qidDataSet (default) and the dataset which must be opened (Dataset.Active = true) before the import begins (before the Execute method is invoked).

See also:
ImportDestination property
DBGrid property
ListView property
StringGrid property
Execute method

2.10.2.12 DBGrid

```
property DBGrid: TDBGrid;
```

Description
The *DBGrid* property points to the target TDBGrid component to import data to. To use a DBGrid instance as import destination, you should set the ImportDestination property to qidDBGrid.

See also:
ImportDestination property
DataSet property
ListView property
StringGrid property
Execute method

2.10.2.13 ErrorLog

```
property ErrorLog: boolean;
```

Description
If *ErrorLog* property is true then all the error messages arisen during the import process are stored in the file specified by the ErrorLogFileName property.

See also:
ErrorLogFileName property
ShowErrorLog property
OnImportError event

2.10.2.14 ErrorLogFileName

```
property ErrorLogFileName: string;
```

Description
The the *ErrorLogFileName* property defines the name of the file to store messages of all the errors occurred during import process. It is used only if the ErrorLog property is True.

See also:
ErrorLog property
RewriteErrorLogFile property
ShowErrorLog property
OnImportError event

2.10.2.15 ExcelMaxColWidth

```
property ExcelMaxColWidth: integer;
```

Description
The the *ExcelMaxColWidth* property defines the maximum width of the Excel grid columns shown on the Step 1 of the wizard if import from Excel is selected.

See also:
ExcelViewerRows property

2.10.2.16 ExcelViewerRows

```
property ExcelViewerRows: integer;
```

Description
Use the *ExcelViewerRows* property to define the number of the Excel grid rows shown on the Step 1 of the wizard if import from Excel is selected.

See also:
ExcelMaxColWidth property
CSVViewerRows property
TextViewerRows property

2.10.2.17 FieldFormats

```
property Formats: TQImportFieldFormats;
```

Description
The complex property *FieldFormats* determines the data formats of each certain imported field.

See also:
TQImportFieldFormats object
Formats property

2.10.2.18 FileName

```
property FileName: string;
```

Description
The *FileName* property determines the name of the file to import data from. This property must not be empty!

See also:
ImportDestination property
Execute method

2.10.2.19 Formats

```
property Formats: TQImportFormats;
```

Description
The complex property *Formats* determines the type of the imported data.

See also:
TQImportFormats object
FieldFormats property

2.10.2.20 GoToLastPageAfterLoadTemplate

```
property GoToLastPage: boolean;
```

Description
If the *GoToLastPage* property is *true*, then, on executing import, the last wizard page is displayed right after the template is loaded into the wizard skipping other pages.

See also:
AutoLoadTemplate property
AutoSaveTemplate property

2.10.2.21 GridCaptionRow

```
property GridCaptionRow: integer;
```

Description

The *GridCaptionRow* property is used only if ImportDestination is *qidStringGrid*. It allows you to set the column captions instead of numbers while setting the column correspondence in the wizard and defines the row in the target *StringGrid* to take captions from.

See also:

ImportDestination property

GridStartRow property

2.10.2.22 GridStartRow

```
property GridStartRow: integer;
```

Description

The *GridStartRow* property is used only if ImportDestination is *qidStringGrid*. It defines the row number in the target StringGrid to start import from. The default value is -1, it means that new rows are added to the end of *StringGrid* when import begins.

See also:

ImportDestination property

GridCaptionRow property

2.10.2.23 ImportDestination

```
type TQImportDestination = (qidDataSet, qidDBGrid, qidListView, qidStringGrid);

property ImportDestination: TQImportDestination;
```

Description

The *ImportDestination* property defines the type of the target object to import data to: TDataSet, TDBGrid, TListView or TStringGrid. Depending on the value of this property, one of the following properties are used for defining the target object: DataSet, DBGrid, ListView or StringGrid.

See also:

DataSet property
DBGrid property
ListView property
StringGrid property

2.10.2.24 ImportMode

```
type TQImportMode = (qimInsertAll, qimInsertNew, qimUpdate, qimUpdateOrInsert, qimDele
```

```
property ImportMode: TQImportMode;
```

Description
The *ImportMode* property allows you to define actions executed while importing data. The following values are available:

qimInsertAll	Inserts all the records from the source file to the target object
qimInsertNew	Inserts records which are not in the target object yet, others are skipped
qimUpdate	Updates those records which already exist in the target object, others are skipped
qimUpdateOrInsert	Updates existing records and inserts new records
qimDelete	Deletes those records which already exist in the target object, others are skipped
qimDeleteOrInsert	Deletes existing records and inserts new records

Note that for all of these modes, except *InsertAll*, you should define the KeyColumns property for defining the columns to search by.

See also:
KeyColumns property

2.10.2.25 ImportRecCount

```
property ImportRecCount: integer;
```

Description

The *ImportRecCount* property defines the number of records to import to the dataset. If its value is 0 then all the records will be imported, otherwise only the defined number of records will be imported.

See also:

OnImportRecord event

2.10.2.26 KeyColumns

```
property KeyColumns: TStrings;
```

Description
The *KeyColumns* property is used if the ImportMode property is different from *qimInsertAll*. It defines columns which must be unique for searching the existing records in the target object.

See also:
ImportMode property

2.10.2.27 ListView

```
property ListView: TListView;
```

Description
The *ListView* property points to the target *TListView* component to import data to. To use a *ListView* instance as import destination, you should set the ImportDestination property to *qidListView*.

See also:
DataSet property
DBGrid property
StringGrid property
ImportDestination property
Execute method

2.10.2.28 Picture

```
property Picture: TPicture;
```

Description
Use the *Picture* property to set the picture shown on starting the wizard (on the "Import from" step). Note that the default picture width is 122 and its height is 346.

2.10.2.29 RewriteErrorLogFile

```
property RewriteErrorLogFile: boolean;
```

Description

If the *RewriteErrorLogFile* property is *True* then the errors are recorded into the file specified by the ErrorLogFileName property, even if such file already exists.

See also:

ErrorLog property
ErrorLogFileName property

2.10.2.30 ShowErrorLog

```
property ShowErrorLog: boolean;
```

Description
If property *ShowErrorLog* is *true* then all the import error messages are shown on screen after the import is finished.

See also:
ErrorLog property
ErrorLogFileName property
OnImportError event

2.10.2.31 ShowHelpButton

```
property ShowHelpButton: boolean;
```

Description

If the *ShowHelpButton* property is *true*, then the 'Help' button will be visible in the wizard window. Using this button the user will be able to access the component help file.

See also:

ShowProgress property

ShowSaveLoadButtons property

2.10.2.32 ShowProgress

```
property ShowProgress: boolean;
```

Description

If the *ShowProgress* property is true then the progress bar showing the import progress will be visible in the wizard window.

See also:

ShowHelpButton property

ShowSaveLoadButtons property

2.10.2.33 ShowSaveLoadButtons

```
property ShowSaveLoadButtons: boolean;
```

Description
If the *ShowSaveLoadButtons* property is *true*, then buttons 'Save template to file' and 'Load template to file' will be visible in the wizard window. Using this buttons the user will be able to save the template with different import options (source filename, field correspondence, format options, etc) to file and then load this template for fastening the import process.

See also:
ShowHelpButton property
ShowProgress property

2.10.2.34 StringGrid

```
property StringGrid: TStringGrid;
```

Description
The *StringGrid* property points to the target *TStringGrid* component to import data to. To use a *StringGrid* instance as import destination, you should set the ImportDestination property to *qidStringGrid*.

See also:
DataSet property
DBGrid property
ListView property
ImportDestination property
Execute method

2.10.2.35 TemplateFileName

```
property TemplateFileName: string;
```

Description
The *TemplateFileName* property defines the template file where all the import settings are stored. If properties AutoSaveTemplate and AutoLoadTemplate are *true*, then import settings are automatically saved to and loaded from this file on each wizard session.

See also:
AutoSaveTemplate property
AutoLoadTemplate property

2.10.2.36 TextViewerRows

```
property TextViewerRows: integer;
```

Description
Use the *TextViewerRows* property to define the number of the text file rows shown on the Step 1 of the wizard if import from TXT is selected.

See also:
CSVViewerRows property
ExcelViewerRows property

2.10.3 Methods

Key methods

Execute

2.10.3.1 Execute

```
function Execute: boolean;
```

Description

The *Execute* method is the central method of the suite. It executes the data import from the source file to the ImportDestination. Of course, for each descendant class the method is defined in its own way, but the logics of the work remains the same for all the components. In case of the invocation, the function checks if the FileName and ImportDestination properties settings are correct; in case of an error, the exceptions are raised and the method stops being executed, returning false as a result. If all the required properties are set correctly, the method starts its work with generating the OnBeforeImport event. After it, the data import to the dataset is started, and after the importing each record the event OnImportRecord takes place. On completion of the process, the event OnAfterImport is invoked.

2.10.4 Events

Key events

OnAfterImport
OnBeforeImport
OnBeforePost
OnDestinationLocate
OnImportCancel
OnImportError
OnImportRecord
OnLoadTemplate
OnNeedCommit

2.10.4.1 OnAfterImport

```
property OnAfterImport: TNotifyEvent;
```

Description
The *OnAfterImport* event takes place when the export is complete and it was interrupted by the Cancel method.

2.10.4.2 OnBeforeImport

```
property OnBeforeImport: TNotifyEvent;
```

Description
The *OnBeforeImport* event takes place right before the import is started, i.e. when the Execute method is invoked.

2.10.4.3 OnBeforePost

```
type TImportBeforePostEvent = procedure(Sender: TObject; Row: TQImportRow; var Accept

property OnBeforePost: TImportBeforePostEvent;
```

Description
The *OnBeforePost* event takes place when the current table row is already delivered from the source table but not posted to the ImportDestination yet. TQImport3 row is the list, containing of field names and values and allowing you to change the field value in the current row before it is posted. The Accept parameter defines if the current row is imported or not.

In the example below all the country names are imported in upper case and all the rows with population more than 10 000 000 are not imported at all.

```
procedure QImport31.BeforePost(Sender: TObject; Row: TQImportRow; var Accept: boolean
var
  i: integer;
begin
  for i := 0 to Row.Count - 1 do begin
    if Row[i].Name = 'Country' then begin
      Row[i].Value := AnsiUpperCase(Row[i].Value);
      Continue;
    end;
    if (Row[i].Name = 'Population') and (StrToInt(Row[i].Value) > 10000000) then begi
       Accept := False;
       Break;
    end;
  end;
end;
```

2.10.4.4 OnDestinationLocate

```
type
  TDestinationLocateEvent = procedure(Sender: TObject; KeyColumns: TStrings; Row: TQIr
var KeyFields: string; var KeyValues: Variant) of object;

property OnDestinationLocate: TDestinationLocateEvent;
```

Description
If the ImportMode property has any value except *qimInsertAll*, and the ImportDestination property is set to *qidDataSet* or *qidDBGrid*, and it is necessary to find the record by *KeyColumns* values, then the *TDataSet.Locate* method is called. You can use the *OnDestinationLocate* event to customize the *TDataSet.Locate* method parameters, such as *KeyFields* and *KeyValues*.

See also:
ImportDestination property
ImportMode property

2.10.4.5 OnImportCancel

```
type TImportCancelEvent = procedure(Sender: TObject; var Continue: boolean); of objec
```

```
property OnImportCancel: TImportCancelEvent;
```

Description
The *OnImportCancel* event takes place when the export process begun by the Execute method is interrupted. Variable *Continue* defines whether the import process should be stopped. If *Continue=False* then import will be aborted, otherwise it will be continued.

2.10.4.6 OnImportError

```
property OnImportError: TNotifyEvent;
```

Description

The *OnImportError* takes place when any error occurs during the import process.

2.10.4.7 OnImportRecord

```
property OnImportRecord: TNotifyEvent;
```

Description

The *OnImportRecord* event takes place after the importing data to each ImportDestination record. It is most frequently used to inform the user about the import execution process, e.g. to display the number of records exported, to increase the ProgressBar position, etc.

2.10.4.8 OnLoadTemplate

```
type TImportLoadTemplateEvent = procedure(Sender: TObject; const FileName: string); of

property OnLoadTemplate: TImportLoadTemplateEvent;
```

Description
The *OnLoadTemplate* event takes place after the template is loaded to the wizard. According to the *FileName* parameter which stands for the template file name, you can take any actions you need.

2.10.4.9 OnNeedCommit

```
property OnNeedCommit: TNotifyEvent;
```

Description

The *OnNeedCommit* event takes place after importing a number of records, defined in the CommitRecCount property, or when the import is finished, if the CommitAfterDone is true. If neither of these properties are defined, the *OnNeedCommit* event will never take place.

Note that you should process the event manually to commit writing data to the dataset.

2.11 TQImport3XLS

2.11.1 TQImport3XLS Reference

Unit
QImport3XLS

Description
The *TQImport3XLS* component is intended for importing the MS Excel e-tables to the dataset. MS Office '97 and higher supported.

2.11.2 Properties

▸ Run-time only 🔑 Key properties

	CommitAfterDone
	CommitRecCount
	DataSet
	FieldFormats
	FileName
	Formats
🔑	ImportRange
	ImportRecCount
🔑	Map
🔑	SkipFirstCols
🔑	SkipFirstRows

2.11.2.1 ImportRange

```
type TQImportRange = (qirMax, qirMin);

property ImportRange: TQImportRange;
```

Description

As number of records may vary in different columns, you should define when import should be stopped: on importing the longest column or on reaching the last record of the shortest column. Set the *ImportRange* property on *qirMax* or *qirMin* in accordance to define this.

See also:

Map property

2.11.2.2 Map

```
property Map: TStrings;
```

Description
To set the correspondence between the dataset fields and the Excel cells you should define the *Map* property in the following way:

FieldName=CellRange

You can define the CellRange string depending on your needs.

Separate cells
To import separate cells, define the CellRange string as set of cell identifiers, e.g. A1, B2, C3, separated by semicolon.

Example

Field1=A1
Field1=A1;B2;C3;

Column
To import entire column or its part, define the string in the following format:

FieldName=FirstCell-LastCell

Example	Imported cells
Field1=A1-A10	From A1 up to A10
Field1=A10-A1	From A10 down to A1
Field1=COLSTART-	From the first cell with data in the column A up to A10
Field1=A10-	From A10 down to the first cell with data in the column A
Field1=A10-	From A10 up to the last cell with data in the column A

Field1=COLFINISH-	From the last cell with data in the column A down to A10
Field1=A-COLFINISH	From the first up to the last cell with data in the column A
Field1=A-COLSTART	From the last down to the first cell with data in the column A

Rows
To import entire row or its part, define the string in the following format:

FieldName=FirstCell-LastCell

Example	Imported cells
Field1=A1-D1	From A1 up to D1
Field1=D1-A1	From D1 down to D1
Field1=ROWSTART-	From the first cell with data in the row 1 up to F1
Field1=F1-	From F1 down to the first cell with data in the row 1
Field1=A10-	From A10 up to the last cell with data in the row 10
Field1=ROWFINISH-	From the last cell with data in the row 10 down to A10
Field1=10-	From the first up to the last cell with data in the row 10
Field1=10-	From the last down to the first cell with data in the row 10

Defining sheets
To define the speciefic sheet, use the following string format:

FieldName=[SheetName]FirstCell-LastCell
or
FieldName=[:SheetNumber]FirstCell-LastCell

Example	Imported cells
Field1=[Sheet1]A1-	From A1 up to A10 at the sheet named Sheet1
Field1=[:3]A1-A10	From A1 up to A10 at the sheet number 3

You can mix cell ranges as you need.

Example

Field1=A1;A3;A10-A15;A15-D15;D15-COLFINISH;[Sheet1]COLFINISH-A1

See also:
ImportRange property
Map property (TQImport3)

2.11.2.3 SkipFirstCols

```
property SkipFirstCols: integer;
```

Description

The *SkipFirstCols* property defines the number of columns, counted from the first in the source table which are not imported to the dataset. E.g. if you set SkipFirstCols=4 then the first four columns of the source Excel table will not be imported.

See also:

SkipFirstRows property

2.11.2.4 SkipFirstRows

```
property SkipFirstRows: integer;
```

Description
The *SkipFirstRows* property defines the number of rows counted from the first in the source table which are not imported to the dataset. E.g. if you set SkipFirstRows=4 then the first four rows of the source Excel table will not be imported.

See also:
SkipFirstCols property

2.11.3 Events

Key events

OnAfterImport
OnBeforeImport
OnBeforePost
OnImportError
OnImportRecord
OnNeedCommit

2.12 TQImport3XLSx

2.12.1 TQImport3XLSx Reference

Unit
QImport3XLSx

Description
The *TQImport3XLSx* component is intended for importing the MS Excel 2007 e-tables to the dataset.

2.12.2 Properties

▸ Run-time only 🔑 Key properties

	CommitAfterDone
	CommitRecCount
	DataSet
	FieldFormats
	FileName
	Formats
🔑	NeedFillMerge
	ImportRecCount
🔑	Map
🔑	LoadHiddenSheets
🔑	SkipFirstRows
🔑	SheetName

2.12.2.1 Map

```
property Map: TStrings;
```

Description
To set the correspondence between the dataset fields and the Excel 2007 table cells you should define the *Map* property in the following way:

FieldName=CellRange

You can define the CellRange string depending on your needs.

Separate cells
To import separate cells, define the CellRange string as set of cell identifiers, e.g. A1, B2, C3, separated by semicolon.

Example

Field1=A1
Field1=A1;B2;C3;

Column
To import entire column or its part, define the string in the following format:

FieldName=FirstCell-LastCell

Example	Imported cells
Field1=A1-A10	From A1 up to A10
Field1=A10-A1	From A10 down to A1
Field1=COLSTART-	From the first cell with data in the column A up to A10
Field1=A10-	From A10 down to the first cell with data in the column A
Field1=A10-	From A10 up to the last cell with data in the column A

Field1=COLFINISH-	From the last cell with data in the column A down to A10
Field1=A1-	From the first up to the last cell with data in the column A
Field1=A1-	From the last down to the first cell with data in the column A

Rows
To import entire row or its part, define the string in the following format:

FieldName=FirstCell-LastCell

Example	Imported cells
Field1=A1-D1	From A1 up to D1
Field1=D1-A1	From D1 down to D1
Field1=ROWSTART-	From the first cell with data in the row 1 up to F1
Field1=F1-	From F1 down to the first cell with data in the row 1
Field1=A10-	From A10 up to the last cell with data in the row 10

Field1=ROWFINISH-	From the last cell with data in the row 10 down to A10
Field1=10-	From the first up to the last cell with data in the row 10
Field1=10-	From the last down to the first cell with data in the row 10

Defining sheets
To define the speciefic sheet, use the following string format:

FieldName=[SheetName]FirstCell-LastCell
or
FieldName=[:SheetNumber]FirstCell-LastCell

Example	Imported cells
Field1=[Sheet1]A1-	From A1 up to A10 at the sheet named Sheet1
Field1=[:3]A1-A10	From A1 up to A10 at the sheet number 3

You can mix cell ranges as you need.

Example

Field1=A1;A3;A10-A15;A15-D15;D15-COLFINISH;[Sheet1]COLFINISH-A1

2.12.2.2 SkipFirstRows

```
property SkipFirstRows: integer;
```

Description

The *SkipFirstRows* property defines the number of rows, counted from the first in the source table which are not imported to the dataset. E.g. if you set SkipFirstRows=4 then the first four rows of the source Excel 2007 table will not be imported.

2.12.2.3 LoadHiddenSheets

```
property LoadHiddenSheets: Boolean;
```

Description
The *LoadHiddenSheets* property defines whether hidden sheets should be loaded.

2.12.2.4 NeedFillMerge

```
property NeedFillMerge: Boolean;
```

Description

The *NeedFillMerge* property defines whether the merged cells should be filled.

2.12.2.5 SheetName

```
property SheetName: string;
```

Description
The *SheetName* property sets the name of the sheet.

2.12.3 Events

Key events

- OnAfterImport
- OnBeforeImport
- OnBeforePost
- OnImportError
- OnImportRecord
- OnNeedCommit

2.13 TQImport3XML

2.13.1 TQImport3XML Reference

Unit
QImport3XML

Description
Use the *TQImport3XLS* component to import your data from the XML files created via the *Advanced Data Export* Component Suite (http://www.sqlmanager.net/en/products/tools/advancedexport) or *TClientDataSet* component.

2.13.2 Properties

▶ Run-time only 🔑 Key properties

	CommitAfterDone
	CommitRecCount
	DataSet
	FieldFormats
	FileName
	Formats
	ImportRecCount
🔑	SkipFirstRows
🔑	WriteOnFly

2.13.2.1 SkipFirstRows

```
property SkipFirstRows;
```

Description

The *SkipFirstRows* property defines the number of rows counted from the first in the source file which are not imported to the dataset. E.g. if you set SkipFirstRows=4 then the first four rows of the source XML file are not imported.

2.13.2.2 WriteOnFly

```
property WriteOnFly : boolean;
```

Description

The *WriteOnFly* property determines how the source xml file will be read and imported. If *WriteOnFly* is set to *False* then the source file will be read and parsed completely, and after that the prepared data will be imported to the destination object (e.g. TDataSet, TDBGrid etc.). If *WriteOnFly* is set to true each tag will be read, parsed and imported separately without temporary saving to memory.

2.14 TQImport3XMLDoc

2.14.1 TQImport3XMLDoc Reference

Unit
QImport3XMLDoc

Description
The *TQImport3XMLDoc* component is intended for importing the any XML documents.

2.14.2 Properties

▸ Run-time only 🔑 Key properties

	CommitAfterDone
	CommitRecCount
	DataSet
🔑	XPath
	FieldFormats
	FileName
	Formats
	ImportRecCount
🔑	Map
🔑	SkipFirstRows
🔑	DataLocation

2.14.2.1 XPath

```
property XPath: qiString;
```

Description
The *XPath* property defines the XPath addressing parts of an XML document (path must be specified in the XPath format), e.g. /DATAPACKET/ROWDATA/ROW.

For more information on the XPath please visit http://www.w3.org/TR/xpath

2.14.2.2 SkipFirstRows

```
property SkipFirstRows: integer;
```

Description
The *SkipFirstRows* property defines the number of records counted from the first in the source table which are not imported to the dataset. E.g. if you set SkipFirstRows=4 then the first four records of the source XML document will not be imported.

2.14.2.3 Map

```
property Map: TStrings;
```

Description
To set the correspondence between the dataset fields and the XML file column you should define the *Map* property in the following way:
DataSet.FieldName1=1,
DataSet.FieldName2=2, etc.

2.14.2.4 DataLocation

```
type TXMLDataLocation = (tlAttributes, tlSubNodes);

property DataLocation: TXMLDataLocation;
```

Description

The *DataLocation* property defines the location of data in XML document (attributes and subnodes text). E.g. if you set DataLocation = tlAttributes the data will be taken from the attributes.

2.14.3 Events

Key events

OnAfterImport
OnBeforeImport
OnBeforePost
OnImportError
OnImportRecord
OnNeedCommit

Part III

3 Units

3.1 QImport3 unit

Components
TQImport3

Objects
TQImportFormats
TQImportRow
TQimportCol
TQImportFieldFormats
TQImportFieldFormat
TQImportReplacements
TQImportReplacement

3.1.1 TQImportFormats object

Unit
QImport3

Description
The *TQImportFormats* class is used in all the descendant TQImport3 components and it contains properties, which determine the imported data formats.

3.1.1.1 Properties

▶ Run-time only 🔑 Key properties

- 🔑 BooleanFalse
- 🔑 BooleanTrue
- 🔑 DecimalSeparator
- 🔑 LongDateFormat
- 🔑 LongTimeFormat
- 🔑 NullValues
- 🔑 ShortDateFormat
- 🔑 ShortTimeFormat
- 🔑 ThousandSeparator

3.1.1.1.1 BooleanFalse

```
property BooleanFalse: TStrings;
```

Description

The *BooleanFalse* property contains the variants of FALSE value representation in the imported table, e.g. '-', 'No', etc.

See also:

BooleanTrue property

3.1.1.1.2 BooleanTrue

```
property BooleanTrue: TStrings;
```

Description

The *BooleanTrue* property contains the variants of TRUE value representation in the imported table, e.g. '+', 'Yes', etc. When import to the boolean field of the dataset takes place, the imported string will be compared with all the strings of the BooleanTrue property, and if the imported string is not found, then the dataset field value will be false.

See also:

BooleanFalse property

3.1.1.1.3 DateSeparator

```
property DateSeparator: char;
```

Description
The *DateSeparator* property defines the character, delimiting months, days and years in the source date fields.

See also:
TimeSeparator property

3.1.1.1.4 DecimalSeparator

```
property DecimalSeparator: char;
```

Description

The *DecimalSeparator* property defines the character which denotes the decimal values in the imported float fields, e.g. '.' or ','.

See also:

ThousandSeparator property

3.1.1.1.5 LongDateFormat

```
property LongDateFormat: string;
```

Description
The *LongDateFormat* property defines the format of the imported long date fields, e.g. 'mm.dd.yy'.

See also:
LongTimeFormat property
ShortDateFormat property
ShortTimeFormat property

3.1.1.1.6 LongTimeFormat

```
property LongTimeFormat: string;
```

Description

LongTimeFormat defines the format of the imported long time format, e.g. '20:10:32'.

See also:

LongDateFormat property
ShortDateFormat property
ShortTimeFormat property

3.1.1.1.7 NullValues

```
property NullValues: TStrings;
```

Description

Use the *NullValues* property to set a value or a number of values which are interpreted as nulls on import.

3.1.1.1.8 ShortDateFormat

```
property ShortDateFormat: string;
```

Description
The *ShortDateFormat* property defines the format of the imported long date fields, e.g. '02.28.2002'.

See also:
LongDateFormat property
LongTimeFormat property
ShortTimeFormat property

3.1.1.1.9 ShortTimeFormat

```
property ShortTimeFormat: string;
```

Description
The *ShortTimeFormat* property defines the format of the imported short time fields, e.g. '20:28'.

See also:
LongDateFormat property
LongTimeFormat property
ShortDateFormat property

3.1.1.1.10 ThousandSeparator

```
property ThousandSeparator: char;
```

Description
The *ThousandSeparator* property defines the character which separates the digit groups in the imported fields, e.g. ' ' or ','.

See also:
DecimalSeparator property

3.1.1.1.11 TimeSeparator

```
property TimeSeparator: char;
```

Description
The *TimeSeparator* property defines the character delimiting minutes and hours in the source date fields.

See also:
DateSeparator property

3.1.2 TQImportRow object

Unit
QImport3

Description
The *TQImportRow* object contains the currently imported table row which was already delivered from the source table, but have not yet been posted to the dataset. This object is used in the OnBeforePost event.

3.1.2.1 Properties

▶ Run-time only	🔑 Key properties

▶	🔑	Items

3.1.2.1.1 Items

```
property Items: TQImportCol;
```

Description

The *Items* property contains fields of the currently imported table row which was already delivered from the source table, but have not yet been posted to the dataset. These data are stored as a set of TQImportCol values, which contain information of each certain field of the table row.
Use this property in processing the OnBeforePost and OnUserDefinedImport events.

See also:
TQImportCol object
OnBeforePost event

3.1.3 TQImportCol object

Unit
QImport3

Description
Each *TQImportCol* object contains one certain field of the currently imported table row (TQImportRow object).

3.1.3.1 Properties

▶ Run-time only 🔑 Key properties

▶	🔑	Name
▶	🔑	Value

3.1.3.1.1 Name

```
property Name: string;
```

Description
The *Name* property determines the TQImportCol field as it contains the column name of the currently imported table row (TQImportRow object).

See also:
TQImportRow component
Value property

3.1.3.1.2 Value

```
property Value: {$IFDEF UNICODE}WideString{$ELSE}string{$ENDIF};
```

Description

The *Value* property contains the string value of the TQImportCol field.

See also:

TQImportRow component

Name property

3.1.4 TQImportFieldFormat object

Unit
QImport3

Description
TQImportFieldFormat represents an item in the TQImportFieldFormats collection. The properties of this object allow you to set various data formats for the certain dataset field. These properties are read in the definite order: generator properties (GeneratorValue and GeneratorStep), ConstantValue, Null properties (NullValue and DefaultValue), Quotation properties (QuoteAction, LeftQuote and RightQuote) and String Conversion properties (CharCase and CharSet).

Thus, if you set *GeneratorStep* to a value other than 0, no other properties are taken into consideration; if you set *ConstantValue* or *NullValue* and *DefaultValue* properties, then you can set only Quotation properties and String Conversion properties.

3.1.4.1 Properties

▶ Run-time only 🔑 Key properties

- 🔑 CharCase
- 🔑 CharSet
- 🔑 ConstantValue
- 🔑 DefaultValue
- 🔑 FieldName
- 🔑 GeneratorStep
- 🔑 GeneratorValue
- 🔑 NullValue
- 🔑 QuoteAction
- 🔑 LeftQuote
- 🔑 RightQuote
- 🔑 Replacements

3.1.4.1.1 CharCase

```
type TQImportCharCase = (iccNone, iccUpper, iccLower, iccUpperFirst, iccUpperFirstWor
```

```
property CharCase: TQImportCharCase;
```

Description

The *CharCase* property defines the character case of the field data. The following values are available:

iccNone	keep the original character case
iccUpper	set the whole string to upper case
iccLower	set the whole string to lower case
iccUpperFirst	set the first letter of the string to upper case
iccUpperFirstWord	set the first letter of each word to upper case

See also:

CharSet property

3.1.4.1.2 CharSet

```
type TQImportCharSet = (icsNone, icsAnsi, icsOem);

property CharSet: TQImportCharSet;
```

Description
The *CharSet* property defines the character set of the field data. The following values are available:

icsNone	save the original character set
icsAnsi	set the field character set to ANSI
icsOem	set the field character set to OEM

See also:
CharCase property

3.1.4.1.3 ConstantValue

```
property ConstantValue: {$IFDEF UNICODE}WideString{$ELSE}string{$ENDIF};
```

Description

The *ConstantValue* property defines the value of the constant field.

3.1.4.1.4 DefaultValue

```
property DefaultValue: {$IFDEF UNICODE}WideString{$ELSE}string{$ENDIF};
```

Description
Use *DefaultValue* to define the value to set when the value set as NullValue is imported.

See also:
NullValue property

3.1.4.1.5 FieldName

```
property FieldName: string;
```

Description

The *FieldName* property contains the name of the field to apply the formats to.

3.1.4.1.6 GeneratorStep

```
property GeneratorStep: integer;
```

Description
The *GeneratorStep* property defines the step of the autoincrement field.

See also:
GeneratorValue property

3.1.4.1.7 GeneratorValue

```
property GeneratorValue: integer;
```

Description
The *Generator* value defines the initial value of the autoincrement field.

See also:
GeneratorStep property

3.1.4.1.8 NullValue

```
property NullValue: {$IFDEF UNICODE}WideString{$ELSE}string{$ENDIF};
```

Description
Use *NullValue* to set the value understood as Null in the imported string. If such value is imported, then the value of the DefaultValue property will be set.

See also:
ConstantValue property
DefaultValue property

3.1.4.1.9 QuoteAction

```
type TQuoteAction = (qaNone, qaAdd, qaRemove);

property QuoteAction: TQuoteAction;
```

Description

The *QuoteAction* property defines the action taken on importing the quotation string to the field. If this property is *qaNone* then no action is taken, if it is *qaAdd* then quotation marks will be added to the imported string, and if it is *qaRemove* then the quotation marks will be removed from the imported quotation string.

See also:

LeftQuote property

RightQuote property

3.1.4.1.10 LeftQuote

```
property LeftQuote: {$IFDEF UNICODE}WideString{$ELSE}string{$ENDIF};
```

Description
The *LeftQuote* property defines the characters which denote quoting in the imported string, e.g. '<<'.

See also:
QuoteAction property
RightQuote property

3.1.4.1.11 RightQuote

```
property RightQuote: {$IFDEF UNICODE}WideString{$ELSE}string{$ENDIF};
```

Description

The *RightQuote* property defines the characters which denote quoting in the imported string, e.g. '>>'.

See also:

QuoteAction property

LeftQuote property

3.1.4.1.12 Replacements

```
property Replacements: TQImportReplacements;
```

Description
Use this property to define the imported field values that are to be replaced and the new values for this fields. Use the TQImportReplacements collection items for to define the text to find and to replace it with, and also the case-sensitivity.

See also:
TQImportReplacements object

3.1.5 TQImportFieldFormats object

Unit
QImport3

Description
The *TQImportFieldFormats* object is the collection of TQImportFieldFormat objects, which allow you to define data formats for each dataset field.

3.1.5.1 Properties

▶ Run-time only	🔑 Key properties

▶	🔑	Items

3.1.5.1.1 Items

```
property Items: TQImportFieldFormat;
```

Description
Use *Items* to access individual items in the collection. The value of the *Index* parameter corresponds to the Index property of TQImportFieldFormat. It represents the position of the item in the collection.

3.1.6 TQImportReplacement object

Unit
QImport3

Description
Use the *TQImportReplacement* object to set the replacement lists for each imported field.

3.1.6.1 Properties

▶ Run-time only 🔑 Key properties

🔑	IgnoreCase
🔑	ReplaceWith
🔑	TextToFind

3.1.6.1.1 IgnoreCase

```
property IgnoreCase: boolean;
```

Description

The *IgnoreCase* property defines if search for the TextToFind text is case-sensitive or not.

3.1.6.1.2 ReplaceWith

```
property ReplaceWith: {$IFDEF UNICODE}WideString{$ELSE}string{$ENDIF};
```

Description
The *ReplaceWith* property contains value to replace imported text from the TextToFind property.

See also:
TextToFind property

3.1.6.1.3 TextToFind

```
property TextToFind: {$IFDEF UNICODE}WideString{$ELSE}string{$ENDIF};
```

Description

The *TextToFind* property defines the text to be found during import and replaced with the ReplaceWith property value.

See also:

ReplaceWith property

3.1.7 TQImportReplacements object

Unit
QImport3

Description
The *TQImportReplacements* object is the collection of TQImportReplacement objects, which allow you to set the list of the replacement values for each imported field.

3.1.7.1 Properties

▶ Run-time only	🔑 Key properties

▶	🔑	Items

3.1.7.1.1 Items

```
property Items[Index: integer]: TQImportReplacement;
```

Description

Use *Items* to access individual items in the collection. The value of the *Index* parameter corresponds to the Index property of TQImportReplacement. It represents the position of the item in the collection.

3.2 QImport3Access unit

Components
TQImport3Access

3.3 QImport3ASCII unit

Components
TQImport3ASCII

3.4 QImport3DataSet unit

Components
TQImport3DataSet

3.5 QImport3DBF unit

Components
TQImport3DBF

3.6 QImport3Docx unit

Components
TQImport3Docx

3.7 QImport3HTML unit

Components
TQImport3HTML

3.8 QImport3ODS unit

Components
TQImport3ODS

3.9 QImport3ODT unit

Components
TQImport3ODT

3.10 QImport3Wizard unit

Components
TQImport3Wizard

3.11 QImport3XLS unit

Components
TQImport3XLS

3.12 QImport3XLSx unit

Components
TQImport3XLSx

3.13 QImport3XML unit

Components
TQImport3XML

3.14 QImport3XMLDoc unit

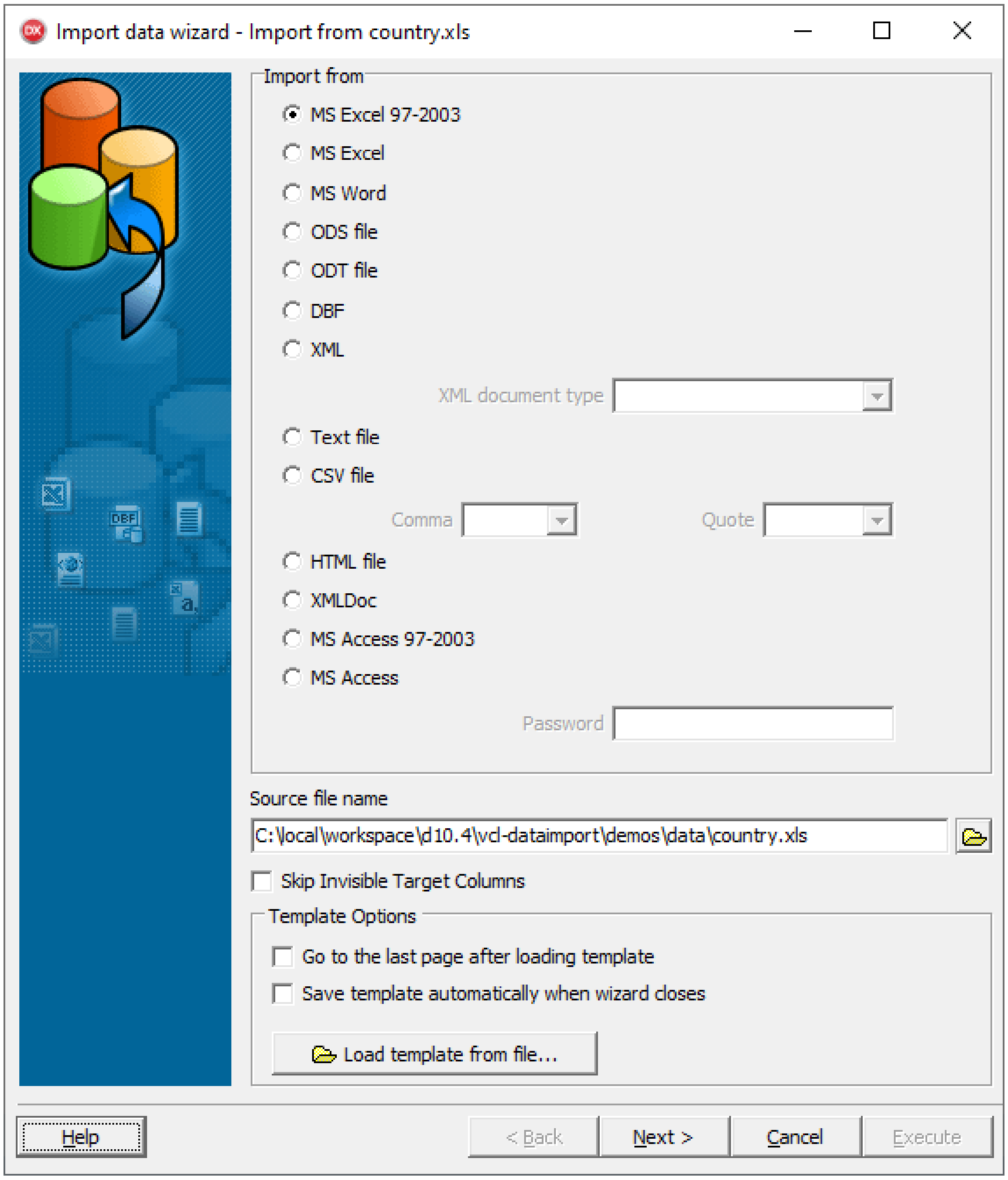
Components
TQImport3XMLDoc

Part IV

4 Advanced Data Import Wizard Guide

EMS Advanced Data Import Wizard guides you through the process of importing data to the dataset.

First specify the format of the source file. For details refer to Supported file formats. If you import data from the CSV file you should also define the character, delimiting columns in the source table, and characters, which stand for left and right quotation marks in the source table.



Import from: [✓ MS Excel 97-2003]

Source file name: C:\local\workspace\d10.4\vcl-dataimport\demos\data\country.xls

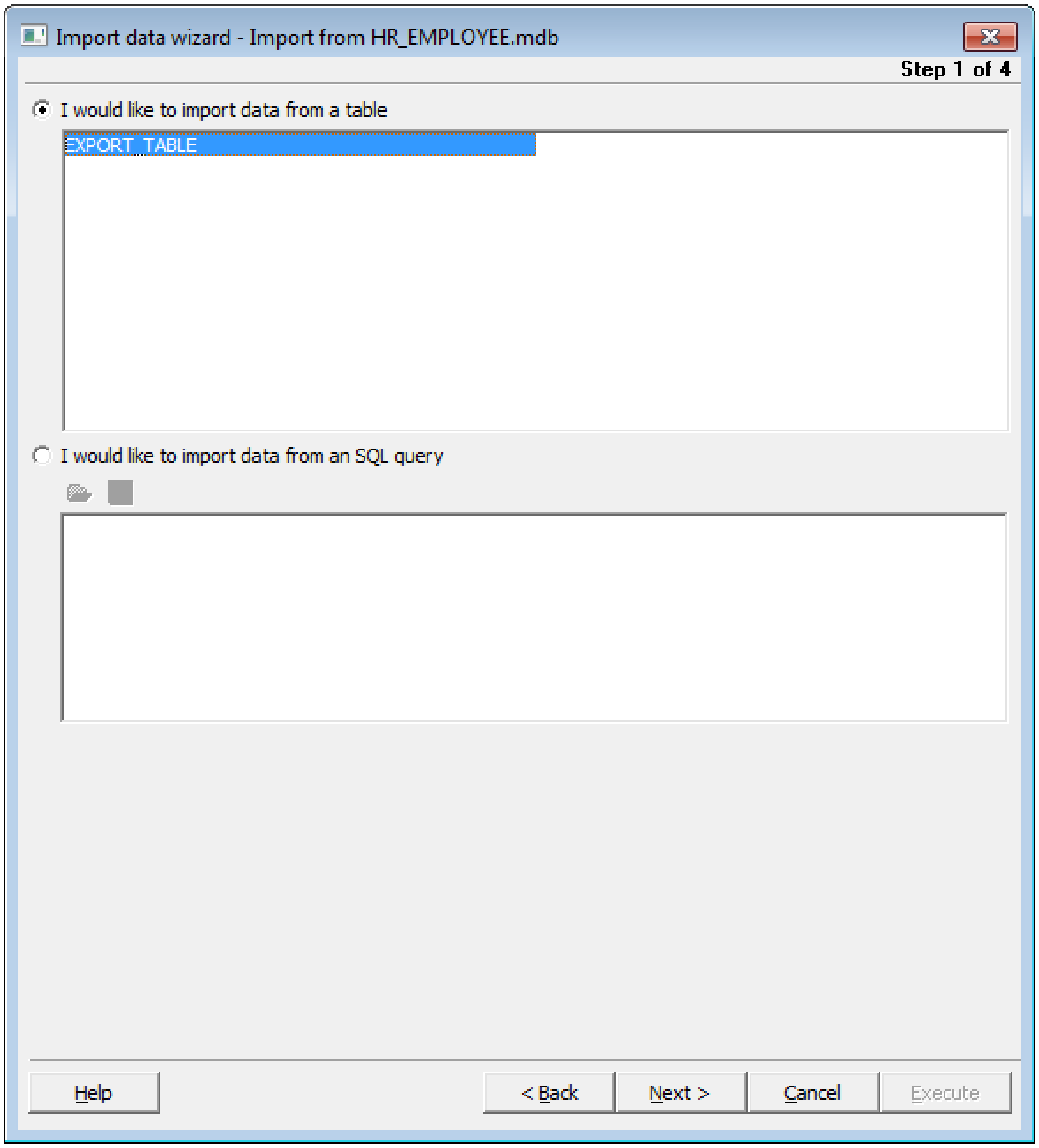
Set the name of the file to import data from in the **Source file name** edit field.

Load template from file - use this button to fasten the process of configuring your current import by loading previously saved template with various import options (source filename, field correspondence, format options, etc) from file.

Click 'Next' to proceed to the first step.

4.1 Selecting Data Source

This step of the wizard is only available when you are importing data from *MS Access*. First select the data source for import - MS Access table or SQL query. If you choose import from a table, then you should select a table name from the list, if you choose to import from a query, you should set the query SQL text in the lower area, e.g. SELECT * FROM COUNTRY WHERE CONTINENT='South America'.


Import data wizard - Import from HR_EMPLOYEE.mdb

Step 1 of 4

[✓ I would like to import data from a table]

EXPORT_TABLE

I would like to import data from an SQL query

Click 'Next' to proceed to the next step.

4.2 Setting Correspondence

This step of the wizard allows you **to set correspondence** between columns of the source file and fields of the table they are imported to.

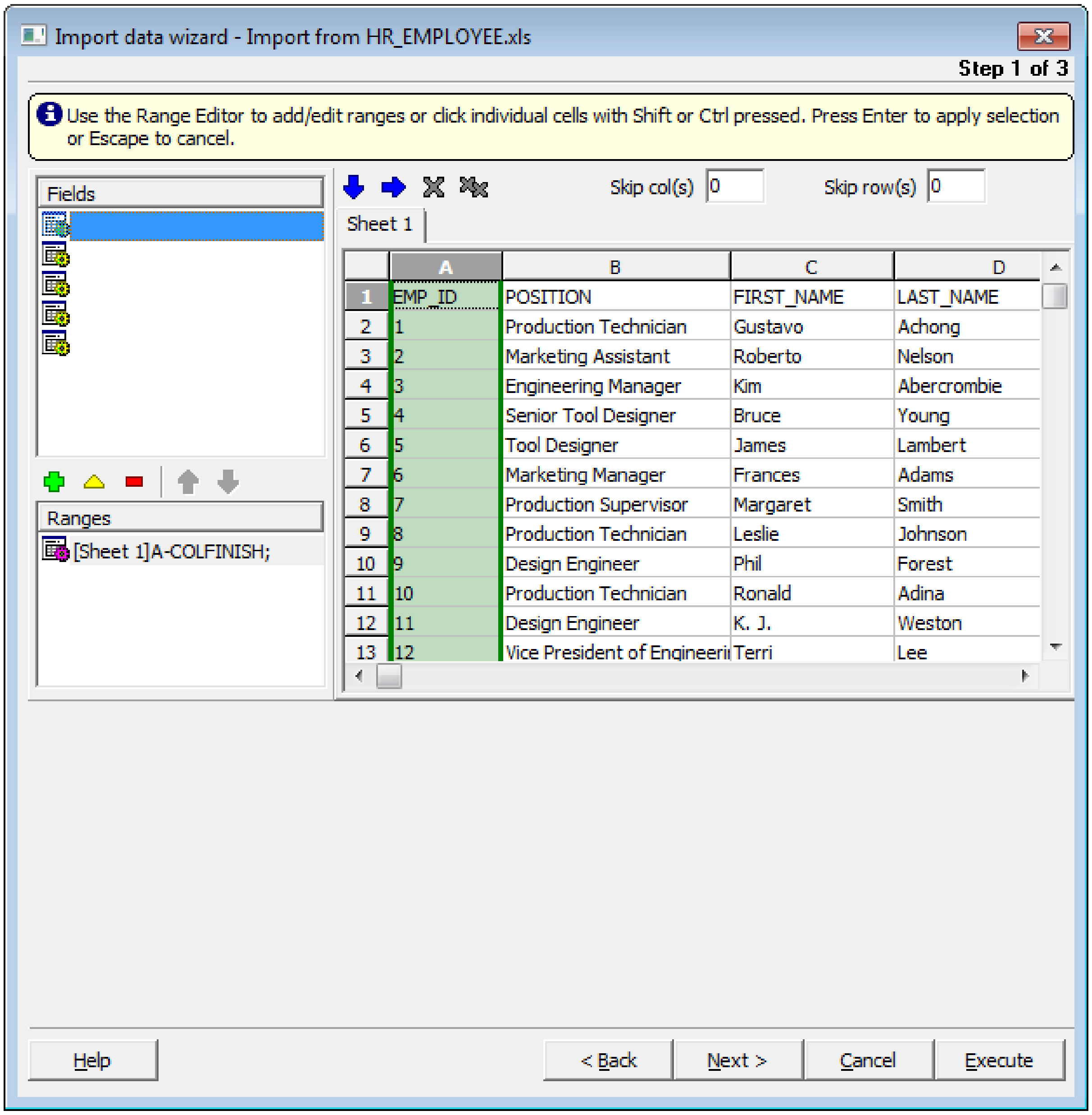
- MS Excel
- MS Access
- DBF
- TXT
- CSV

To get more information about the file formats, see the Supported file formats page.

Click 'Next' to continue or click 'Back' to return to the previous step.

4.2.1 MS Excel

First select the dataset field from the 'Fields' drop-down list. Then select the corresponding cells by clicking row or column caption (to select the whole row or column) or clicking the individual cells, using Shift and Ctrl keys.
You can also define the corresponding cells manually in the 'Cells' edit field. Use semicolon to separate multiple cells.
After you select all the corresponding cells for the current table field, proceed to another field and repeat all these operations for each dataset field.



Import data wizard - Import from HR_EMPLOYEE.xls

Step 1 of 3

Use the Range Editor to add/edit ranges or click individual cells with Shift or Ctrl pressed. Press Enter to apply selection or Escape to cancel.

Fields

Skip col(s) 0   Skip row(s) 0

Sheet 1

Ranges

[Sheet 1]A-COLFINISH;

	A	B	C	D
1	EMP_ID	POSITION	FIRST_NAME	LAST_NAME
2	1	Production Technician	Gustavo	Achong
3	2	Marketing Assistant	Roberto	Nelson
4	3	Engineering Manager	Kim	Abercrombie
5	4	Senior Tool Designer	Bruce	Young
6	5	Tool Designer	James	Lambert
7	6	Marketing Manager	Frances	Adams
8	7	Production Supervisor	Margaret	Smith
9	8	Production Technician	Leslie	Johnson
10	9	Design Engineer	Phil	Forest
11	10	Production Technician	Ronald	Adina
12	11	Design Engineer	K. J.	Weston
13	12	Vice President of Engineeri	Terri	Lee

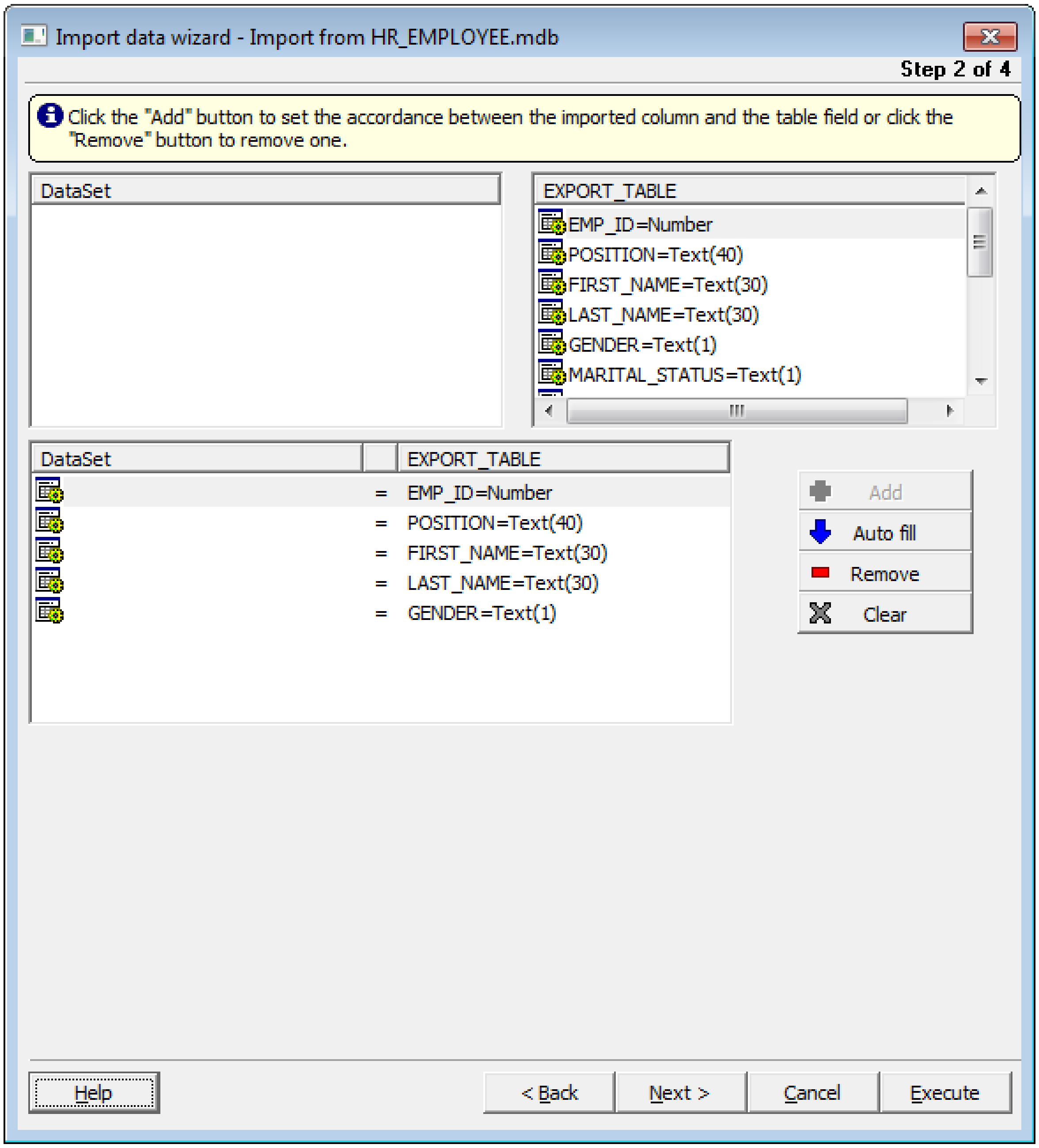
If you don't want some first rows or columns of the source table to be imported, set the number of such rows in the 'Skip ... first row(s)' and 'Skip first ... col(s)' edit fields.

Auto fill cols - use this button to set the correspondence between the source table

columns and the dataset fields automatically. It is convenient if they are ordered in the same way. First table column will correspond to the first dataset field, second column to the second field, etc. If quantity of the table columns exceeds quantity of the dataset fields, then the last columns will have no correspondence.
Auto fill rows - use this button to set the correspondence between the source table rows and the dataset fields automatically. It is convenient if they are ordered in the same way. First table row will correspond to the first dataset field, second row to the second field, etc. If quantity of the table rows exceeds quantity of the dataset fields, then the last rows will have no correspondence.

4.2.2 MS Access

First select the dataset field from the 'DataSet' list. Then select the corresponding field in the '<TABLE_NAME>' or 'Custom query' list.
Click button 'Add' to link these fields. These fields will be added to the list at the bottom of the window. Repeat these operations for each dataset field. If you want to remove the accordance you set, select the linked fields in the bottom list and click button 'Remove'.



Click the "Add" button to set the accordance between the imported column and the table field or click the "Remove" button to remove one.

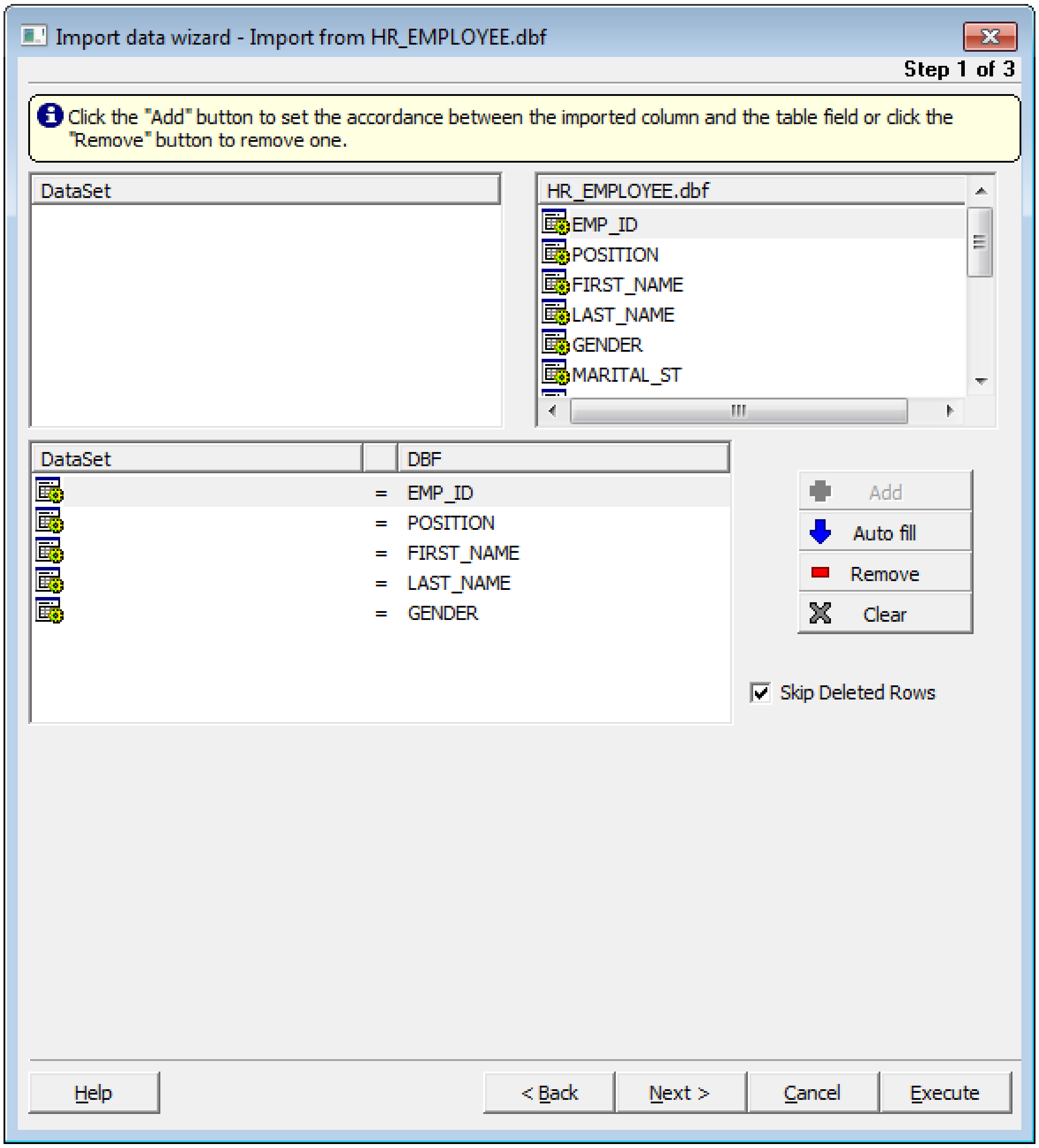
DataSet	EXPORT_TABLE
	EMP_ID=Number
	POSITION=Text(40)
	FIRST_NAME=Text(30)
	LAST_NAME=Text(30)
	GENDER=Text(1)
	MARITAL_STATUS=Text(1)

DataSet		EXPORT_TABLE
	=	EMP_ID=Number
	=	POSITION=Text(40)
	=	FIRST_NAME=Text(30)
	=	LAST_NAME=Text(30)
	=	GENDER=Text(1)

Auto fill - use this button to set the correspondence between the source table fields and the dataset fields automatically. It is convenient if they are ordered in the same way. First table field will correspond to the first dataset field, second field to the second field, etc. If quantity of the table fields exceeds quantity of the dataset fields, then the last fields will have no correspondence.

4.2.3 DBF

First select the dataset field from the 'DataSet' list. Then select the corresponding field in the '<TABLE_NAME>.DBF' list.
Click button 'Add' to link these fields. These fields will be added to the list at the bottom of the window. Repeat these operations for each dataset field. If you want to remove the accordance you set, select the linked fields in the bottom list and click button 'Remove'.



Click the "Add" button to set the accordance between the imported column and the table field or click the "Remove" button to remove one.

HR_EMPLOYEE.dbf: EMP_ID, POSITION, FIRST_NAME, LAST_NAME, GENDER, MARITAL_ST

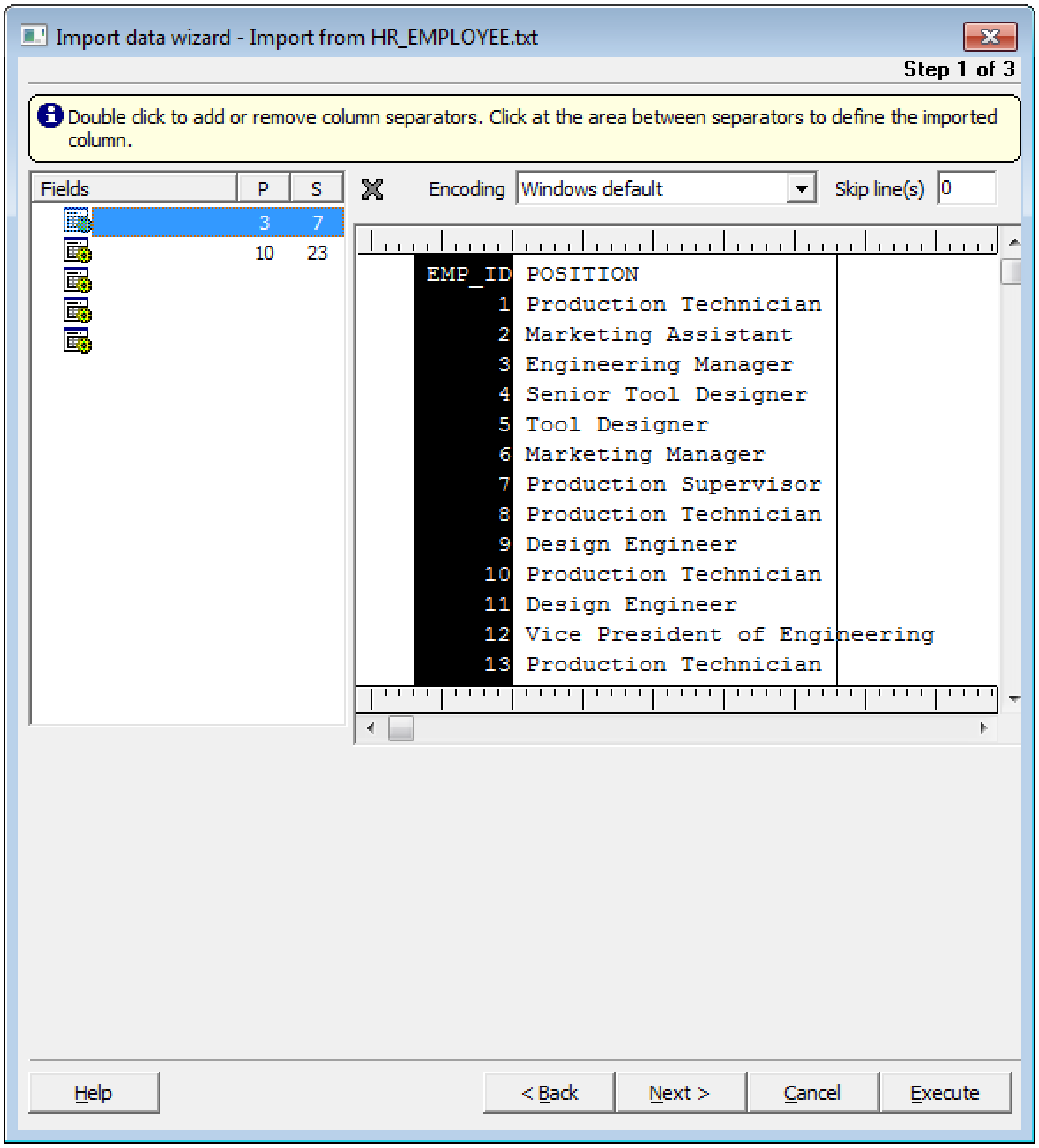
DataSet		DBF
	=	EMP_ID
	=	POSITION
	=	FIRST_NAME
	=	LAST_NAME
	=	GENDER

☑ Skip Deleted Rows

Auto fill - use this button to set the correspondence between the source table fields and the dataset fields automatically. It is convenient if they are ordered in the same way. First table field will correspond to the first dataset field, second field to the second field, etc. If quantity of the table fields exceeds quantity of the dataset fields, then the last fields will have no correspondence.

4.2.4 TXT

First select the dataset field from the 'Fields' drop-down list. Then set two separator lines to delimit the source table column. Click to add a separator, double-click to delete one. Drag separators to change the column width. You can also set the column starting position and the column width manually in the edit fields 'Pos' and 'Size'.
When you set the separators correctly, proceed to another field and repeat these operations for each dataset field.



Double click to add or remove column separators. Click at the area between separators to define the imported column.

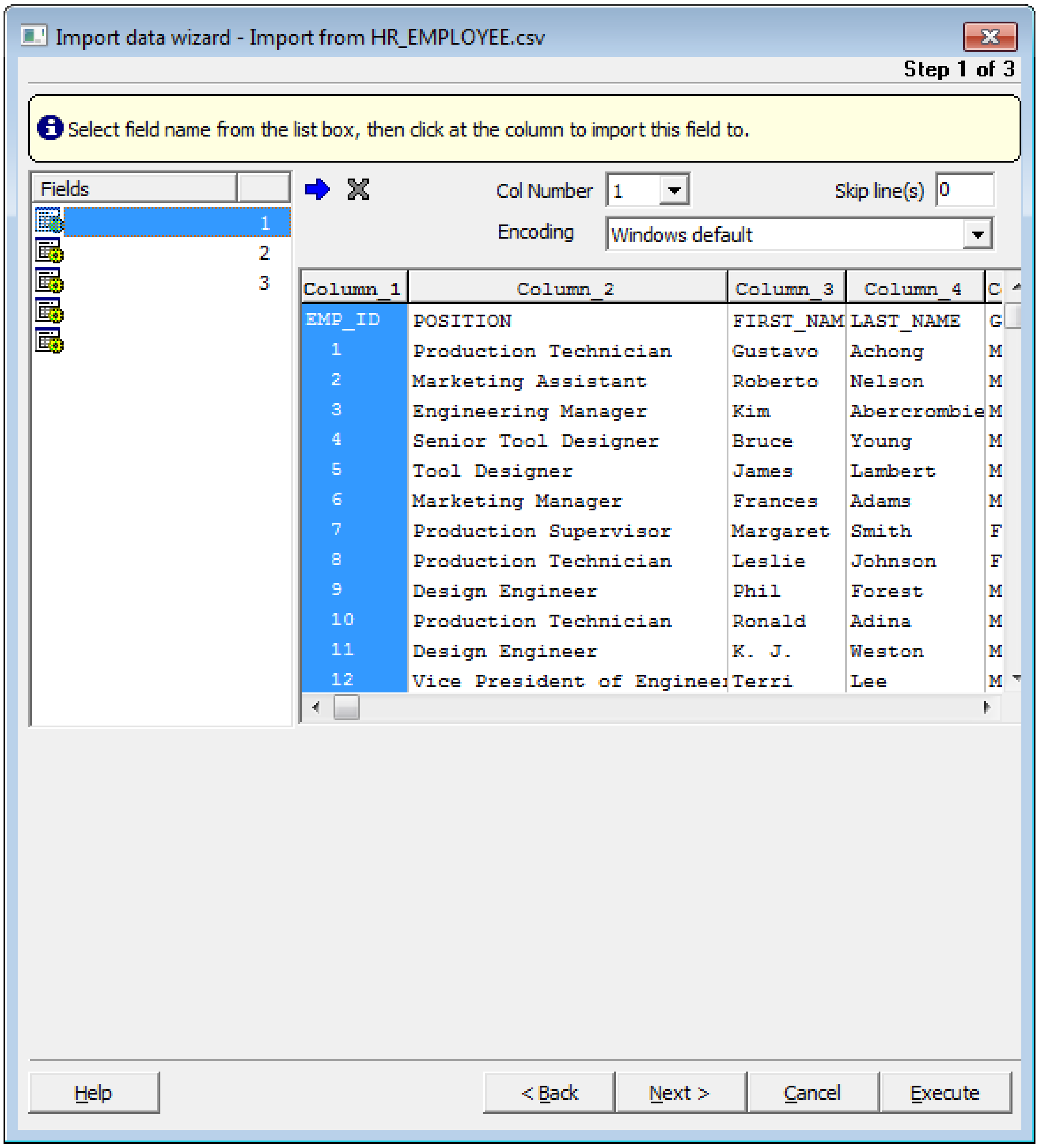
Fields	P	S
	3	7
	10	23

```
EMP_ID POSITION
     1 Production Technician
     2 Marketing Assistant
     3 Engineering Manager
     4 Senior Tool Designer
     5 Tool Designer
     6 Marketing Manager
     7 Production Supervisor
     8 Production Technician
     9 Design Engineer
    10 Production Technician
    11 Design Engineer
    12 Vice President of Engineering
    13 Production Technician
```

If you don't want some first rows of the source table to be imported set the number of such rows in the 'Skip ... first line(s)' edit field.

4.2.5 CSV

If the delimiter you have defined on the first step was found in the source table, then you will find the table columns already separated and delimited. Select the dataset field from the 'Fields' drop-down list. Then click the corresponding source table column or set the 'Col' value manually. Repeat these operations for each dataset field.



Select field name from the list box, then click at the column to import this field to.

Col Number: 1
Skip line(s): 0
Encoding: Windows default

Column_1	Column_2	Column_3	Column_4	C
EMP_ID	POSITION	FIRST_NAM	LAST_NAME	G
1	Production Technician	Gustavo	Achong	M
2	Marketing Assistant	Roberto	Nelson	M
3	Engineering Manager	Kim	Abercrombie	M
4	Senior Tool Designer	Bruce	Young	M
5	Tool Designer	James	Lambert	M
6	Marketing Manager	Frances	Adams	M
7	Production Supervisor	Margaret	Smith	F
8	Production Technician	Leslie	Johnson	F
9	Design Engineer	Phil	Forest	M
10	Production Technician	Ronald	Adina	M
11	Design Engineer	K. J.	Weston	M
12	Vice President of Enginee	Terri	Lee	M

If you don't want some first rows of the source table to be imported set the number of such rows in the 'Skip ... first line(s)' edit field.

Auto fill - use this button to set the correspondence between the source table columns and the dataset fields automatically. It is convenient if they are ordered in the same way.

First table column will correspond to the first dataset field, second column to the second field, etc. If quantity of the table columns exceeds quantity of the dataset fields, then the last columns will have no correspondence.

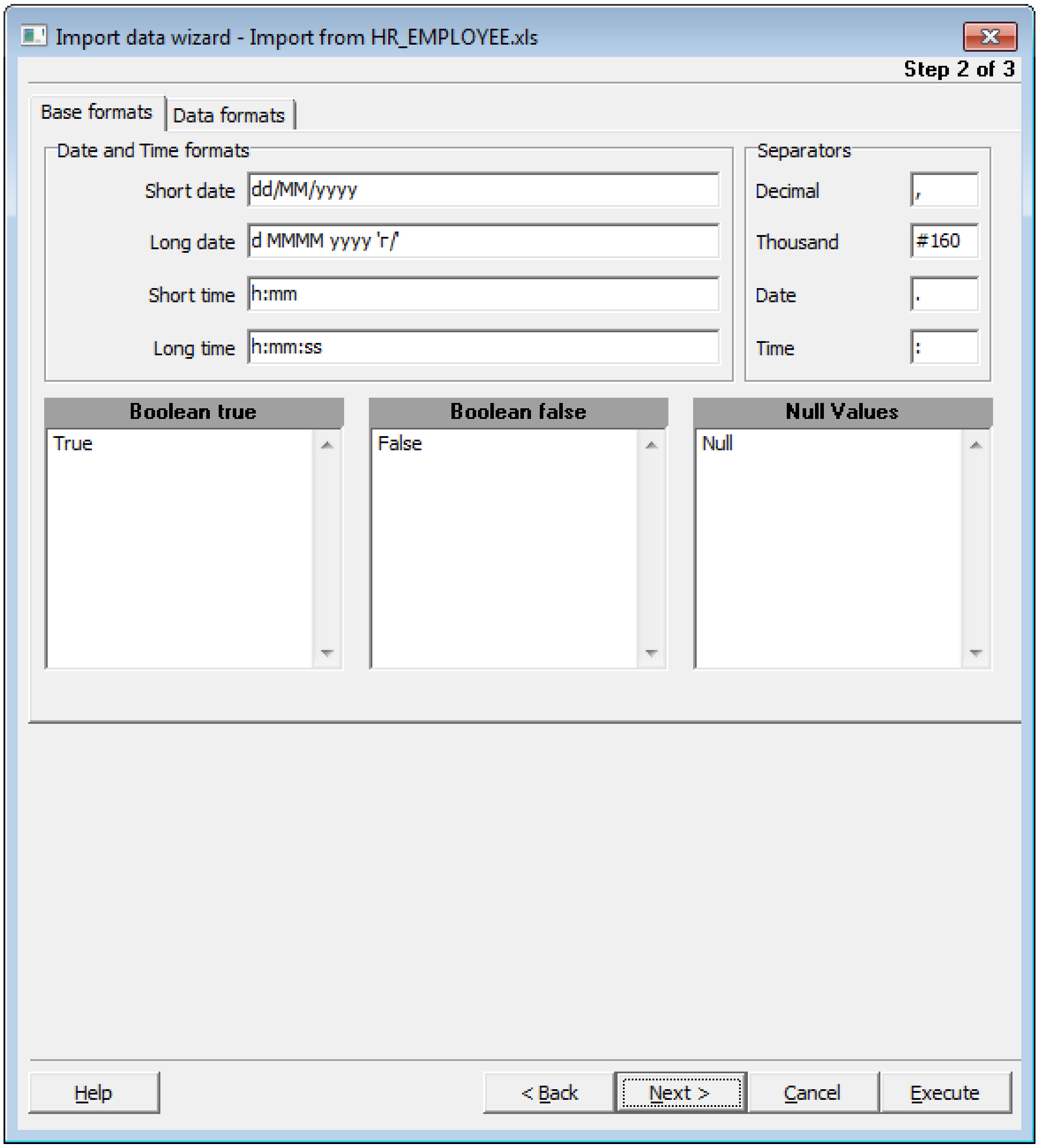
4.3 Specifying Base Formats

Regional settings

Decimal separator - set a character, which delimits the decimal parts of the imported numbers.
Thousand separator - set a character, which separates the digit groups in the imported numbers.
Short date format, Long date format, Short time format, Long time format - use these edit fields to set the date and time formats.

Format options

Left quotation - set a character or a number of characters, which denote quoting in the imported strings.
Right quotation - set a character or a number of characters, which denote unquoting in the imported strings.
Quotation action - you can select 'Add' to add quotation marks to each imported string or 'Remove' to remove all the quotation marks from the imported strings.



Date and Time formats

Short date	dd/MM/yyyy
Long date	d MMMM yyyy 'г/'
Short time	h:mm
Long time	h:mm:ss

Separators

Decimal	,
Thousand	#160
Date	.
Time	:

Boolean true	Boolean false	Null Values
True	False	Null

Boolean true - set some variants of TRUE value representation in the imported table, e.g. 'Yes' or '+'. Use new line for each new variant.
Boolean false - set some variants of FALSE value representation in the imported table, e.g. 'No' or '-'. Use new line for each new variant.

Data Formats

On this tab you can customize the format of each imported field in case when additional formatting is required. Select the field in the 'Field Name' list and set its format in the proper edit fields.

Tuning

Generator Value - use this edit field to set the initial value of the autoincrement field.
Generator Step - set the step of the autoincrement field. If it is 0 then the value of the generator will be ignored.
Constant Value - use this edit field to set the constant value of the field.
Null Value - set the value, which will be understood as NULL to set the default value.
Default Value - set the default value of the NULL field.

Left quotation - set a character or a number of characters, which denote quoting in the imported string.
Right quotation - set a character or a number of characters, which denote unquoting in the imported string.
Quotation action - you can select 'Add' to add quotation marks to the imported string, 'Remove' to remove all the quotation marks from the imported string or 'As is' to save the original quotation marks.
Char case - set the case of the imported string. 'As is' saves the original string, 'Upper' sets the whole string to upper case, 'Lower' sets the whole string to lower case, 'UpperFirst' sets the first letter of the string to upper case, 'UpperFirstWord' sets the first letter of each word to upper case.
Char set - set the char set of the imported string to ANSI or OEM. 'As is' saves the original string char set.

Replacements

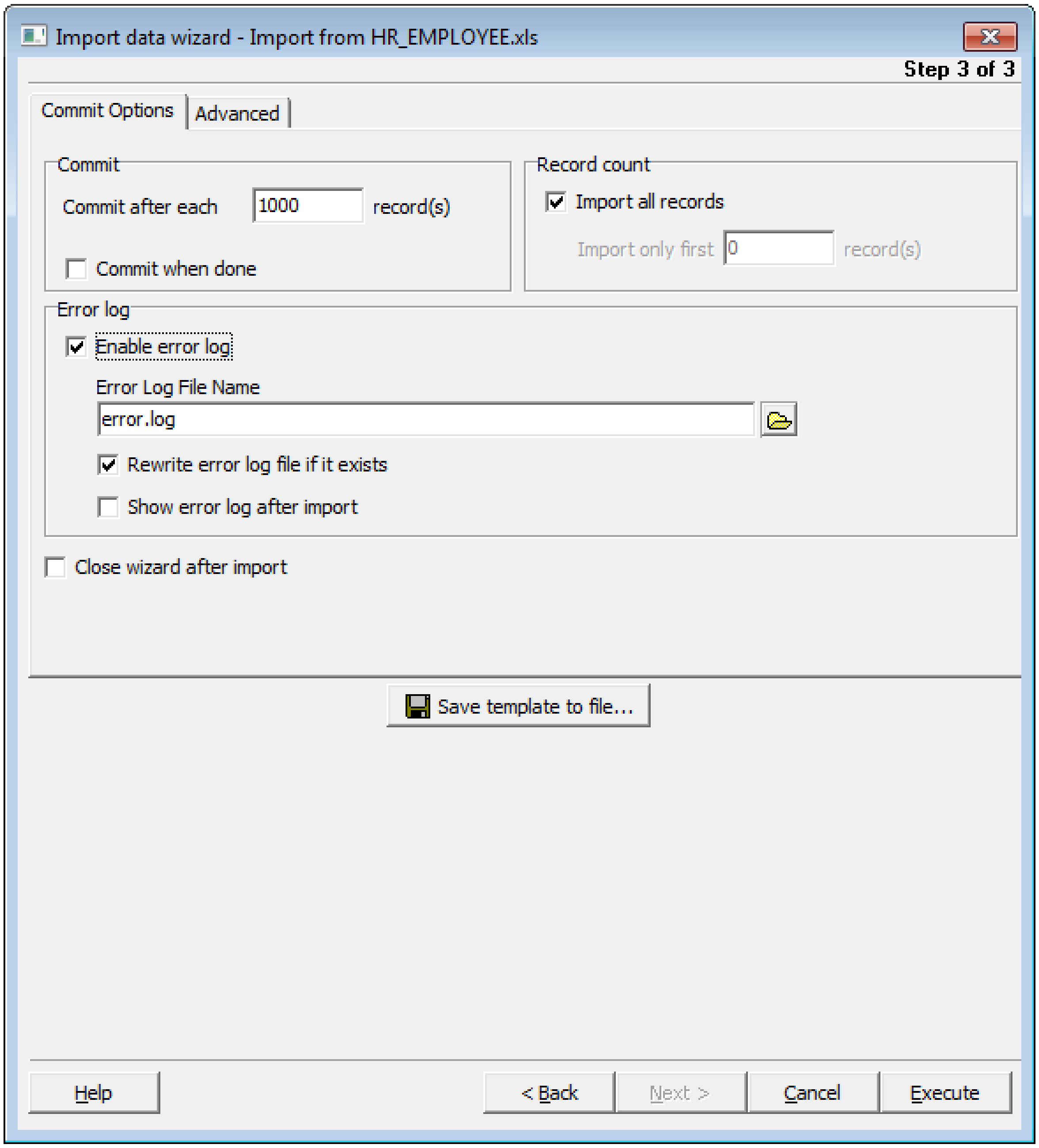
Use this tab to set the replacement list for the selected field. Fill the list in the following format:
<Value-to-find>=<Replace-with-Value>.
E.g., you set the following replacemts for the field 'Continent':
'South America'='S. America'
'North America'='N. America',
that means, that all the values 'South America' of the field 'Continent' will be replaced with values 'S. America', and values 'North America' will be replaced with 'N. America' respectively.

Click 'Next' to continue or click 'Back' to return to the previous step.

4.4 Setting Import Options

Commit

Commit after done - check this option to commit the transaction after import is finished.
Commit after ... records - set a number of records, after importing which the transaction shall be committed.



Import data wizard - Import from HR_EMPLOYEE.xls

Step 3 of 3

Commit
Commit after each 1000 record(s)
[ ] Commit when done

Record count
[✓] Import all records
Import only first 0 record(s)

Error log
[✓] Enable error log
Error Log File Name: error.log
[✓] Rewrite error log file if it exists
[ ] Show error log after import

[ ] Close wizard after import

Record count

Import all records - check this option to import all records from the source table.

Import only ... first record(s) - if you don't want all the records to be imported, set a number of records to import them from the source file. In this case only this number of records (beginning from the first one) will be imported.

Miscellaneous

Add Type - select the method of adding data to the dataset: Append or Insert.

Save template to file - use this button to save current import options (source filename, field correspondence, format options, etc) to file to fasten the process of configuring your next import.

Click 'Execute' when you are done to start import, click 'Back' to return to any step of preparing import or click 'Cancel' to cancel import.

Part V

5 Appendix

5.1 Supported file formats

MS Excel
The most popular e-table format used by Microsoft® Excel (**.xls*). The result files are fully compatible with Microsoft® Excel versions 97-2003.

MS Access
File of Microsoft® Access format (**.mdb*) with an ADO connection used.

MS Word
One of the most popular text processing formats used by Microsoft® Word (**.doc*). The result files are fully compatible with Microsoft® Word versions 97-2003.

RTF
Rich Text Format (**.rtf*) supported by many text processing programs (e.g. WordPad).

HTML
Hyper Text Markup Language file format (**.html*, **.htm*), complete compatibility with HTML 4.0 specification.

PDF
A standard format in electronic publishing (**.pdf*).

Text file
Plain text file format (**.txt*).

CSV file
Comma-Separated Value file format (**.csv*).

DIF file
Data Interchange File (**.dif*) format.

SYLK
Symbolic Links (**.slk*) file format.

Note: All the text formats including *Text file*, *CSV*, *DIF*, *SYLK* are usually used as working or interchange formats.

LaTeX
A specific file format (**.tex*) which is a popular (especially among mathematicians and physicists) macroextension of *TeX* pack developed by D.Knut.

XML
A markup language for documents containing structured information (**.xml*).

DBF
Database file format (**.dbf*) used by dBASE and a number of xBASE applications.

MS Excel
The contemporary e-table format used by Microsoft® Excel (**.xlsx*).

MS Word
The contemporary text processing format used by Microsoft® Word (**.docx*).

ODF Spreadsheets
OASIS Open Document Format for Office Applications - open document file format for spreadsheets (**.ods*) used by a number of applications including OpenOffice.org and KOffice.

ODF text
OASIS Open Document Format for Office Applications - open document file format for word processing (**.odt*) documents used by a number of applications including OpenOffice.org and KOffice.

Credits

Software Developers:

Alexey Butalov

Alex Paclin

Alexey Saybel

Dmitry Ziborov

Alexey Gusev

Technical Writers:

Dmitry Doni

Semyon Slobodenyuk

Olga Ryabova

Cover Designer:

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