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Introduction to QDA Miner 6.0

QDA Miner is an easy-to-use qualitative data analysis software package for coding textual and graphical data, annotating, retrieving and reviewing coded data, documents and images. The program can manage complex projects involving large numbers of documents combined with numerical and categorical information. QDA Miner also provides a wide range of exploratory tools to identify patterns in codings and relationships between assigned codes and other numerical or categorical properties. Documents are stored in Rich-Text Format and support font and paragraph formatting, graphics and tables. Documents may be edited at any time without affecting the existing coding.

QDA Miner can import and export documents, data and results in numerous document file formats (MS Word, WordPerfect, RTF, HTML, Test files, PDF documents, Ebook and PowerPoint), datafile formats (MS Access, Excel, CSV, TAB, **SPSS**, Stata, TripleS 1.2, EndNote, MBox, PST and RIS), graphic file formats (BMP, WMF, JPG, JPEG, GIF, PNG), and other qualitative software file formats (QSR N6, NVivo, Atlas.ti, HyperResearch, Ethnograph, Transana, Transcriber and QDA XML). It can retrieve data from online services such as SurveyMonkey, Qualtrics, SurveyGizmo, QuestionPro, Voxco, Mendeley and Zotero, Email services such as Outlook, Hotmail and Gmail, **news from Lexis Nexis or Factiva**, as well as social media services like Twitter, Facebook and RSS feeds. It also provides unique integration with advanced quantitative content analysis, text-mining (WordStat) and statistical analysis (Simstat) tools, providing easy combination and integration of qualitative and quantitative methods.

Installation Instructions

To install QDA Miner on your computer from the installation CD, place the CD in your CD drive. The installation program should start automatically. If it does not start, double-click the **My Computer** desktop shortcut and then the **CD drive** icon to display the contents of the CD. Double-click the **Install** icon on the CD and follow the setup directions on the screen.

If you have downloaded the software, simply double-click the **SetupQM.exe** icon and follow the instructions on your screen.

If running the software for the first time, you will be asked to activate it. See the [Software Activation](#) section for instructions on how to activate your product.

Software Activation

Product activation is a set of simple and quick steps taken upon installation prior to using your application. It ensures that only valid licenses are used. When your application is installed it contacts a central server across the internet to 'activate' your software and tie it to the provided activation, printed on the installation CD sleeve or provided to you by email with your license file. A manual activation by email may also be performed on computers without access to the internet.

Unlike other activation systems, this activation system does not tie your license permanently to your computer hardware. Instead, your license is tied to your activation code and a password that you define. As a result, you will have no problem re-activating your software after reformatting your hard drive, after upgrading hardware components in your computer, or when you move your software to a new computer.

You are permitted to install and activate the software on a maximum of two computers, provided that they will never be running at the same time. Typically, you may install a copy on a desktop and another one on a laptop. You may also install and activate a copy at work and another copy at home. It is important to remember, however, that you must not use the software at the same time.

Note: Activating the software on a third computer will cause the previous two installations to be deactivated and requires you to re-activate the latest installation. Please note that you are limited to a certain number of reactivations per month.

Activating your Software

- Run QDA Miner.
- You will be presented with a dialog box that will ask you for your **Activation Code**.
- Enter the activation code that was provided to you by email or is printed on the installation CD sleeve.
- If no internet connection was detected or if a firewall prevents you from connecting to the internet, you will need to activate the software manually. See the manual activation by email instructions below.
- If you have an internet connection, a new dialog box will appear, asking you for additional information. Fields marked with an asterisk (*) must be provided. You will be asked to provide a password. You will need this password if you ever want to reactivate your software. You must provide a new, never previously used, password each time you re-activate the software. We suggest you do not use an important personal password or a password that personally identifies you for the activation.
- Enter your email address. This email address will be used to retrieve a lost password upon request. Be sure to use an email account you will have long-term access to.
- Click **Activate**.

Manual Activation by Email

Activating QDA Miner on a computer that is not connected to the Internet can be done by email using the following steps:

- Locate the **Provalis Research** folder on the user's hard drive. By default, this folder is located in the **Program Files** folder. (You may also click on the following link if to open the [C:\Program Files \(x86\)\Provalis Research](#) folder).
- Copy the file named **QDAMiner.reg** from this folder onto your CD, floppy disk, or memory key.
- E-mail this file as an attachment to sales@provalisresearch.com.
- You should receive an email, normally within 24 hours, with a new file named **QDAMiner.CDM**.
- Copy this file into the **Provalis Research** folder.

Manual Software Activation

Activating QDA Miner on a computer that is not connected to the Internet can be done in 2 ways.

Transferring Files with Another Computer (Fastest Method)

If you have access to another computer that is connected to the Internet, and if you have a way of transferring files between these two computers (via CD, floppy disk, memory key, etc.), follow the instructions below.

- Locate the **Provalis Research** folder on the user's hard drive. By default, this folder is located in the Program Files folder. Double-click on **QDAMiner.exe** to open the program. When you see the button to activate the program, click it, despite not having online access. This action will create the file needed for subsequent steps.

You will then see a screen asking for your activation key. Type in your activation key and click **Next**. You will then see a screen which says "It looks like this computer isn't connected to the Internet." Click **OK** and exit QDA Miner.

- Copy the file named **QDAMiner.LIC** from this folder onto your CD, floppy disk, or memory key.
- Go to a computer which does have access to the Internet and insert the CD, floppy disk, or memory key into this computer.
- Access the Internet and go to <http://www.softworkz.com/offline>.
- You will see a screen with the words **Offline activation - Upload .LIC file**. Click on **Browse**, and locate the file **QDAMiner.LIC** on your CD, floppy disk, or memory key. Then click **Upload file**.
- A screen will appear asking you for your activation code. It will also ask you to create a password, and to type in your email address (if you have one). Please provide your email address in the case that you need your password to be sent to you at a future date.
- Click **Activate**. If the activation is successful, click on a button labeled **Download License (.CDM) File**. You will be given instructions on how to download a file called **QDAMiner.CDM** to your CD, floppy disk, or memory key.
- Finally, take the CD, floppy disk, or memory key back to the computer with QDA Miner on it and copy this file **QDAMinre.CDM** into the **Provalis Research** folder.

By Email

- Follow the first two steps above to copy the file **QDAMiner.LIC** from your computer to a floppy disk, CD, or memory key.
- E-mail this file as an attachment to sales@provalisresearch.com.

You should receive an email, normally within 24 hours, with a new file named **QDAMiner.CDM**.

Upgrading the Software

Minor revisions to QDA Miner are likely to be released on a regular basis and made available on the Provalis Research website. These releases may include bug fixes, minor improvements and new features. Unless otherwise indicated, if your version of QDA Miner has the same starting number as the version available on the web, you are entitled to a free upgrade. For example, if you purchased the version 5.0 of QDA Miner, and the current version available on the website is 5.2.1, you should be able to upgrade to this version for free.

To upgrade your software to the latest version:

- Go to the QDA Miner website by selecting the **QDA MINER HOMEPAGE** from the **HELP** menu, or click the following link provalisresearch.com/downloads/updates/.
- Go to the download section of the site, download the trial version of QDA Miner and install this version over your existing one. QDA Miner will automatically register the trial version and transform it into a fully functional version.

Project Structure

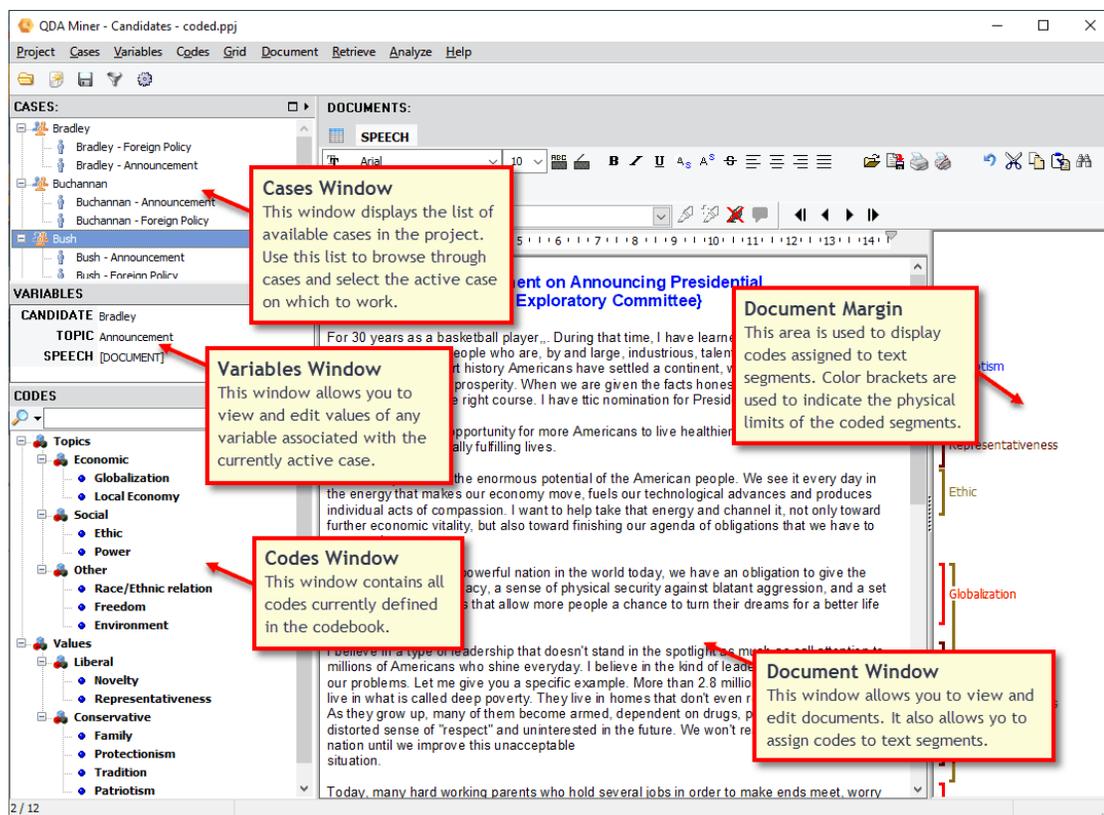
QDA Miner keeps all documents, coding schemes, codes, and notes in a set of files called a "project". QDA Miner projects consist of multiple cases. A case is the basic unit of analysis of a project. It typically represents an individual, an organization, or a group, it can also be a document or a news story. A case can contain several documents as well as numerous alphanumeric, numeric, categorical, date or Boolean variables. These variables are used to specify the properties associated with a case. Up to 2035 variables can be associated with each case. The number of cases in a single project is limited by disk space up to a maximum of 4 to 8 gigabytes.

For example, if you want to analyze transcripts of in-depth interviews of numerous individuals, you may end up creating a project file where each case contains information associated with a single interviewee. One or more document variables may be created to contain transcripts of those interviews. You may also add other variables to specify socio-demographic information for the interviewee, group membership, as well as the interview date and individual responses to closed-ended questions.

One of the unique features of QDA Miner is its ability to explore relationships between any one of the properties and codes manually assigned to documents. For example, you can assess how the content of an interview is related to the interviewee's gender or age, or how it relates to specific answers to a close-ended question.

The Working Environment

The QDA Miner working environment provides numerous tools to manage, view, edit, and code documents. It also gives access to a variety of retrieval and analysis tools. The picture below provides an example of the QDA Miner workspace.



The Workspace

The QDA Miner workspace consists of a menu bar at the top and four windows.

- The **CASES** window contains the list of available cases in the project. These cases are displayed either as a list or grouped as a tree. This window is used mainly to browse through cases and select the active case on which to work.
- The **VARIABLES** window displays and allows editing of values for any variable associated with the currently active case.
- The **CODES** window, located in the lower left corner of the screen, contains all codes currently defined in the codebook.
- The large **DOCUMENTS** window on the right side of the screen is the main working space. This window is used to view and edit documents and images and assign codes to text segments or image areas. When a case contains more than one document or image, you can switch between them by selecting the document/image tab located in the top left corner of this window. To the right of the **DOCUMENTS** window is a **gutter area**. This area is used to display the codes assigned to text segments and image areas. A second **gutter area** is displayed below images. Colored brackets are used to indicate the physical limits of the coded segment. This area is used to review coding, remove or change assigned codes, and attach notes to any coded segment. (See [Working with Code Mark](#)).

Each window may be resized either horizontally or vertically by dragging its border. The three windows in the left panel may be maximized to take up most of the available vertical space by clicking on the button located in the top right corner of the window. Clicking on the button restores the maximized window to its original size. You can also minimize a window by clicking on the button. The “folded” window may then be restored by clicking on the button.

The Grid View Mode

For coding short text responses such as open-ended responses or customer feedback, the large **DOCUMENTS** window can be split horizontally to reveal at the top a grid displaying text responses for all cases. This grid view allows coding full text responses while the lower document window remain visible for situations where one needs to code only a portion of text from the selected case. Various filtering and sorting operations are available as well as coding statistics. When the **Grid View** mode is active, the **CASES** window is hidden since browsing through cases and select them is now performed by moving through the grid row. (See [Coding Documents Using the Grid View](#))

The Main Menu

The **PROJECT** drop-down menu gives you access to various operations related to entire projects, such as project creation, opening and configuration. This menu also includes commands related to the import, export and backup of project files. Additionally, it gives access to various maintenance and teamwork operations (including merging and duplicating of projects) and to auditing tools such as the **Command Log** and the **Report Manager** features.

Operations associated with the main four windows of the working environment are grouped under menus with corresponding names. For example, all operations relevant to the **CASES** window are grouped under the **CASES** drop-down menu, while all commands relevant to the codebook currently displayed are located under the **CODES** drop-down menu.

The text and code retrieval features are located in the **RETRIEVE** drop-down menu and the various exploratory tools available in QDA Miner (coding sequences or co-occurrences analysis, heatmaps and correspondence analysis plot, etc.) are all grouped under the **ANALYZE** drop-down menu. This menu also provides access to external modules such as WordStat (quantitative content analysis and text mining) and Simstat (statistical analysis).

Navigating Through Cases

There are now three ways to navigate through cases. You can move to a specific case by clicking its entry in the **CASES** window. You can browse through cases, by pressing the **Ctrl-PgDn** button to move to the next case or **Ctrl-PgUp** to move to the previous case. You can also use the navigation toolbar located above the document window. This toolbar displays the following four buttons.

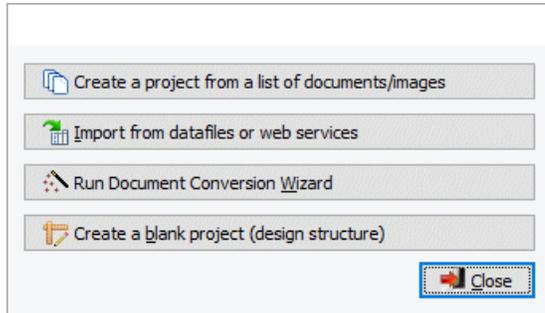
- ◀ Move to the first case of the project.
- ◀ Move back to the previous case.
- ▶ Move forward to the next case.
- ▶ Move to the last case of the project.

Data Management Features

Opening an Existing Project

Opening a Project from the Introductory Screen

QDA Miner stores data files in a folder named **Projects**. The **Projects** folder is located in the QDA Miner program folder. When you start QDA Miner, an introductory dialog box appears similar to the one below.



To open a recently opened project:

- Click the **Re-open a recently opened project** button and select its name from the displayed drop-down list. QDA Miner keeps track of the ten most recently used project files.

To open another project:

- Click the **Open an existing project** button. The **File** dialog box will appear.
- Locate and select your project (a QDA Miner project is stored with a .WPJ file extension).
- Click the **Open** button.

Opening a Project When the QDA Miner Program is Already Running

To open an existing project:

- Select the **OPEN** command from the **FILE** menu. The **File** dialog box will appear.
- Locate and select your project (a QDA Miner project is stored with a .PPJ file extension).
- Click the **Open** button.

To open a recently opened project:

- Select the **REOPEN** command from the **FILE** menu.
- Click the project file that you want to reopen.

Opening a Project from Windows Explorer:

- You can also open a project by double-clicking its icon in Windows Explorer:



Creating a New Project

There are four ways of creating a QDA Miner project: (1) You can create a simple project by importing one or several documents; (2) you can create a new project from scratch by creating a project structure and then manually entering data and documents; (3) you can import existing data and documents stored in another file format such as Excel, MS Access, dBase, Paradox, QSR N6, HyperResearch 2.x, Transana, Transcriber, etc. and from web services such as SurveyGizmo, Twitter, Zotero and Gmail etc.; or (4) you can also use the Document Conversion Wizard utility program to import several documents at once, perform a transformation and data extraction, and store them in a new project.

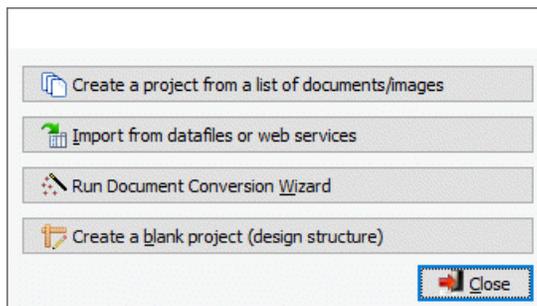
The following sections provide you with a description of these four methods.

Creating a Project from a List of Documents

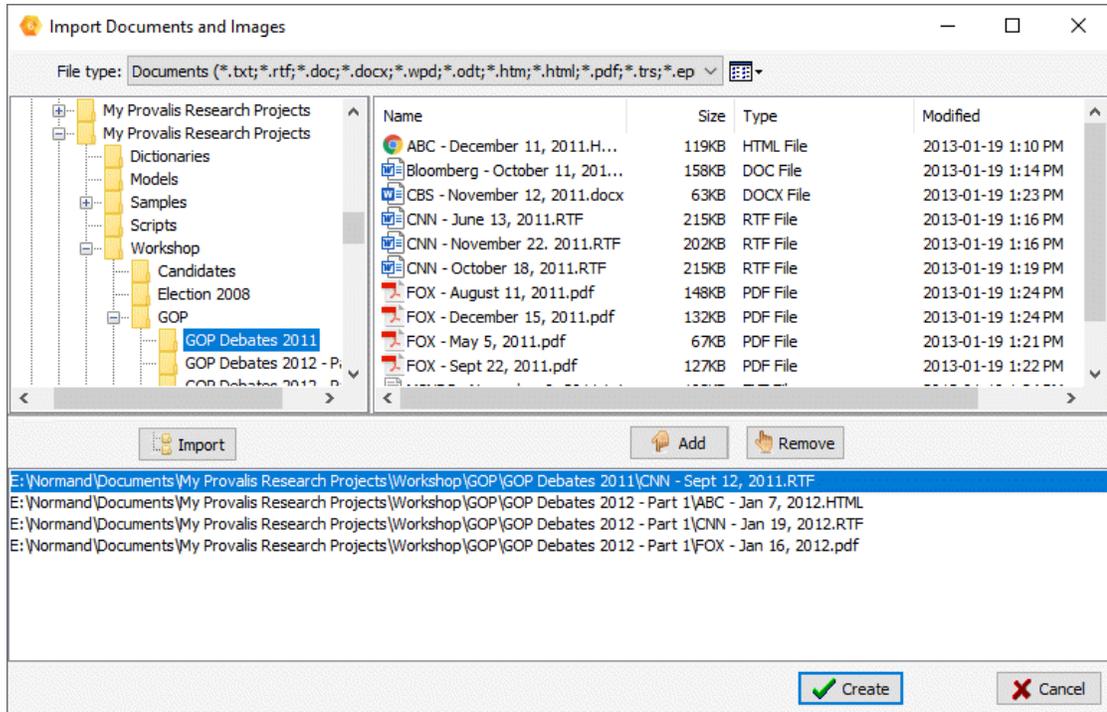
The easiest method to create a new project and start performing analysis in QDA Miner is by specifying a list of existing documents or images and importing them into a new project. This method creates a simple project with two or three variables: a categorical variable containing the original name of the files from which the data originated, a **DOCUMENT** variable containing imported documents and/or an **IMAGE** variable containing imported graphics. All text and graphic files are stored in different cases, therefore, if 10 files have been imported, the project will have 10 cases with two or three variables each. To split long documents into several documents or to extract numerical, categorical, or textual information from documents and store it in additional variables, use the [Document Conversion Wizard](#).

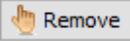
To create a new project from a list of documents or images:

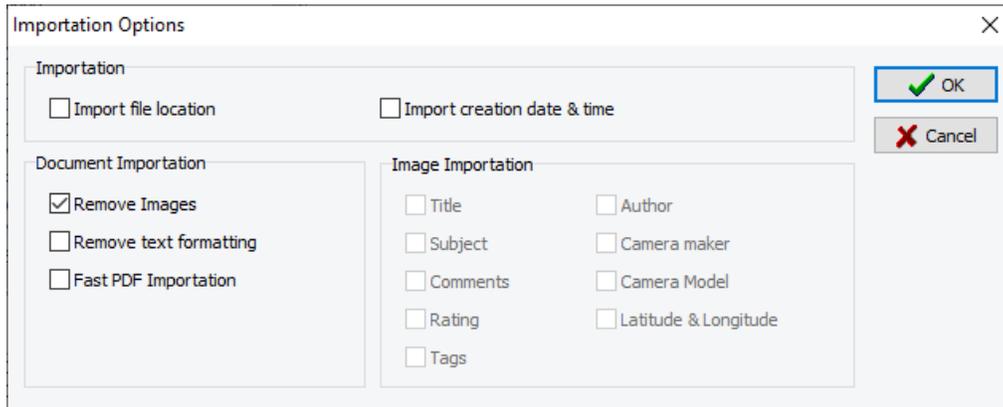
- Select the **NEW** command from the **PROJECT** menu. This command calls up a dialog box similar to the one below.



- Click the **Create a project from a list of documents/images** button. A dialog box similar to the one below will appear.



- In the upper right section of the dialog box, QDA Miner displays all supported document file formats that may be imported, such as MS Word, WordPerfect, RTF, PDF documents, plain text files or HTML etc. as well as all graphic file formats supported (BMP, JPG, GIF, PNG and WMF). To display only files of a specific type, set the **File type** list box to the desired file format.
- Click the file you would like to import. To select multiple files, hold down the **Ctrl** key while clicking on the other files.
- Click the  **Add** button to add the selected files to the list of files to import, located at the bottom of the dialog box. You may also drag the files from the top right section to this list.
- Click the  **Import** button to add numerous files contained within a folder. A dialog box will appear giving you the option of including **subfolders** and choosing **file types** to include in the import.
- To remove a file from the list of files to import, select that file name and click the  **Remove** button.
- Once all files have been selected, click the **Create** button. A dialog box similar to the one below will appear.



You have the options to **Import file location** and **Import creation date & time**. If you select these options, this information will become variables entitled **LOCATION** and **CREATED**.

At this point your importation options differ depending on if you are importing documents, images or both. QDA Miner will only make the importation options of the file type(s) that you have chosen available to you. Other options will be grayed out.

Document Importation Options:

The **Remove Images** option has been set by default. When importing formatted documents like Word, HTML or PDF files, images stored in the document may significantly increase the resulting document size and slow down the browsing and text-processing speed of QDA Miner and WordStat. To keep the images in the imported documents, disable this option.

Check the **Remove Text Formatting** checkbox to further reduce the size of the imported documents if the text formatting of the existing documents such as the font styles and colors or the paragraph formatting are not relevant. Enable this option to convert all documents into plain-text documents without any formatting or images.

Image Importation Options:

JPG files may contain information such as the geographic location a photo was taken, a title and description added by the author and even attached comments. This information can be imported and stored as variables. These variables may then be used in combination with the GIS feature to plot coded image properties on a map and to look at their spatial distribution. Check the image importation options you wish to include.

- Set the importation options.
- Click the **OK** button.
- Choose a name for your project and save it in the appropriate location. QDA Miner will close this dialog box, import the specified files into a new project and bring you to the main workspace.

Related topics:

- To add additional numeric or categorical variables to each case, see [Adding New Variables](#).
- To append new documents or images in new cases, see [Appending New Documents/Images](#).
- If you would like to monitor a folder for new documents or images to be appended to your project see [Monitoring File or Folder](#).
- For more information about the importation of PDF files, see [Importing PDF files](#).

Notes on Importing PDF files

The PDF file format is designed to display text in the same way on various platforms. Different strategies have been considered in QDA Miner to support PDF files. They could simply be imported as is and stored in the QDA Miner project, allowing you to view the documents exactly as they appear in Acrobat. You could then code the PDF documents directly. Such an approach has, however, several inconveniences. First, the document may not be edited, preventing you from removing unnecessary information, such as headers and footers, appearing on each page or unrelated information like advertising. Also, PDF files are often created by outputting each page and each line of text separately, often resulting in the loss of the original document structure. Carriage returns will often be inserted at the end of each line, paragraphs spread over two pages remain physically split up, as do hyphenated words. In multi-column documents, lines from different columns may even be mixed up. All these minor imperfections would prevent you from retrieving full sentences and paragraphs in QDA Miner and may reduce recall results when searching for specific words or phrases separated by hyphens, carriage returns or page limitations. Such issues would also undermine the performance of numerous features of WordStat relying on phrase identification, word co-occurrence analysis or proximity rules.

Therefore, we chose to import PDF documents by converting them into editable documents, storing them in rich-text format, just like any other document file type supported by QDA Miner. The conversion engine has been carefully designed to remove hyphens and unnecessary carriage returns, adjust the text flow in multi-column documents, and import tables and images correctly. While headers and footers will still be imported, which will break the flow of text across pages, you may now easily identify those and remove them from the text since the imported document will be fully editable.

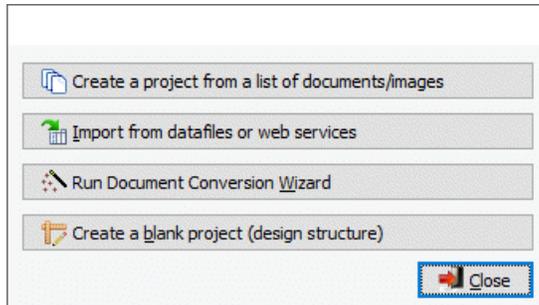
Despite all the advanced importation features, some PDF documents may still not be imported properly. Several factors may explain such difficulties. Some PDF files consist of only scanned images of the original document and contain no text at all. These can be easily recognized by the fact that it is not possible to select any text segment or that text searches never return any hits. Other documents may have quite complex layout designs, making their proper importation quite difficult. For those documents, we recommend pre-processing them with full-fledged OCR (Optical Character Recognition) software like Abby's [FineReader](#) or Nuance's OmniPage or by some PDF to Word conversion utility tools like PDF Transformer by Abby. Although the latest version of Acrobat Professional does include some OCR features, its performance was deemed not good enough to preserve the document structure.

We also recommend removing images or scaling down the graphic resolution of images to the lowest setting because images will significantly increase the resulting document size and will slow down the browsing and text-processing speed of QDA Miner and WordStat.

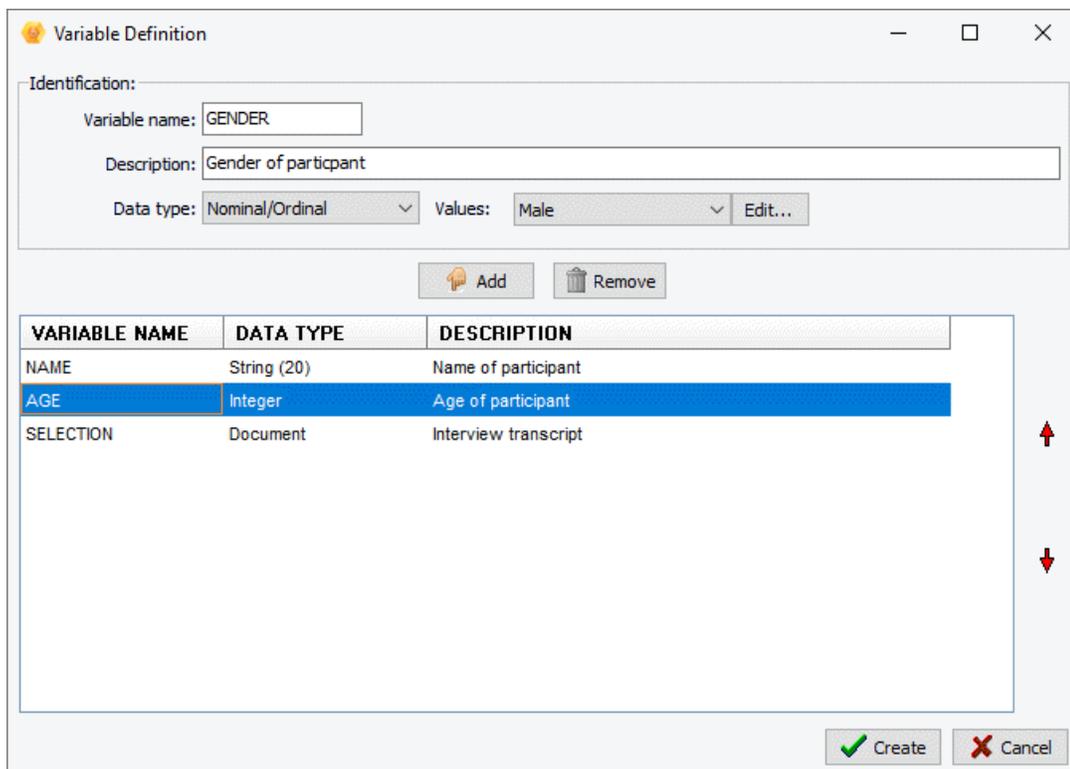
Creating a Blank Project

To create a blank project:

- Select the **NEW** command from the **PROJECT** menu. This command calls up a dialog box similar to the one below.



- Select the **Create a blank project** button. The **Variable Definitions** dialog box will appear.



The first step involved in creating a new project file is to define the initial structure of the project file. This structure is defined by the list of variables that each case will contain. A variable may contain a document or an image to be manually coded, but can also consist of a numeric value, a date, a Boolean value (true or false), etc. A single project can contain up to 2035 variables per case. It is possible to create several document and image variables for each case. The ability to store many documents per case is especially useful when the project involves a set of several document types. A document variable may also be created to store notes or comments that are specific to a case. QDA Miner can later be instructed to search and analyze specific document or image variables or in all documents.

In the **Variable Definitions** dialog box, you can define various attributes for the new variables, such as their name and whether they will contain numeric, alphanumeric values, or dates.

Creating a New Variable

Variable name: The first edit box at the top of the dialog box allows you to enter a variable name. Each variable name must be unique (within that project file). Valid variable names begin with a letter and may contain letters, numbers or underscore characters. Punctuation marks, blank spaces, accentuated and other special characters are not permitted. The maximum variable name length is ten characters.

Description: This option is used to enter a variable label that describes in more detail the content of the variable. You may leave this column blank if you wish since it is always possible to add or edit a description later using the **PROPERTIES** command from the **VARIABLES** menu.

Data type: Each variable in the data file must have a type. QDA Miner supports the following types:

Document: This data type is used to store documents that will be manually coded. QDA Miner stores text in this data type using Rich Text Format (RTF). This format enables the use of different fonts and styles and paragraph formatting. Graphics and tables may also be inserted in the document. Numerous file formats may be directly imported into document variables, such as plain ASCII files (*.TXT), Rich Text files (*.RTF), MS Word documents (*.DOC), HTML (*.HTM or *.HTML) and WordPerfect documents (*.WPD) (see [Importing a Document or an Image into the Current Project](#)).

Image: This data type is used to store graphics that will be manually coded. Numerous file formats may be directly imported into document variables, such as Windows bitmaps (*.BMP), Windows Meta Files (*.WMF), or Enhanced Meta Files (*.EMF), Compuserve Graphic Interface (*.GIF), Portable Network Graphics (*.PNG) or JPEG files (*.JPEG) (see [Importing a Document or an Image into the Current Project](#)).

Numeric: Numeric variables can contain either integer or floating-point numbers. When you choose floating point numbers, you will be asked to specify the number of decimal places to display. Floating-point numbers are stored in the data file using double precision values (at least 15 significant digits). The option is used exclusively to control how numeric values are displayed in the Variables grid and in other locations and does not affect the internal precision of the variable.

Nominal/Ordinal: Nominal or ordinal variables are used to hold a limited number of short strings used to describe specific properties of a case. For example, you may choose to use this variable type to identify the gender of the interviewee ("male" or "female") or its group membership ("manager", "employee", "client", etc.). You may also use this data type to hold ordinal ranking ("novice", "intermediate", or "expert") or responses to close-ended questions such as Likert scale items (e.g.: from "strongly disagree" to "strongly agree"). You should use this data type instead of short strings if you plan to analyze this variable or examine the relationship between its values and any other variable or coding of documents.

When a nominal/ordinal data type is selected, you will be asked to first provide a list of **values** that this variable can take. To enter new values, click the **Edit** button. You can start typing values (one value per line) in the large edit box. If the current variable uses the same values as another existing variable, you may also establish a link to this other variable so that they will share the same list of values. Click **OK** to confirm the setting of these values. Note: this list may later be modified to add new values or edit existing ones.

Date: The date type holds a year, month and day. The display and data entry format used for dates are based on the Windows date setting.

Date & Time: The date & time variable holds a data, expressed in year, month and day, as well as a time stamp in hours, minutes and seconds. The display and data entry format used for dates are based on the Windows date setting.

Boolean: The Boolean type stores a value that can be either true or false (or Yes or No).

Short String: Short string variables can contain up to 254 alphanumeric characters. When creating a short string variable, you must first specify the maximum number of characters this variable will hold.

To create a variable:

- Type the name of your variable in the **Variable name** field.
- Enter a description of the variable in the **Description** field if you choose.
- Choose a **Type** for your variable.
- Set the option associated with the chosen data type (see above).
- Click the **Add** button to add the defined variable to the list.

To remove a variable from the list:

- Select the row containing the variable you want to remove.
- Click the **Remove** button.

To change the position of a variable in the list:

- Select the row containing the variable you want to move.
- Click the **Up** or **Down** arrows located to the right of the grid until the variable appears in the desired location.

To create the data file:

- When you have finished defining the structure of the new project, click the **Create** button.
- Enter the project name and save it in the location of your choosing. The variables will be imported and you will be taken to QDA Miner's main workspace.

Importing an Existing Data File or Web Service

QDA Miner allows you to directly import data files from spreadsheet and database applications, as well as from plain ASCII data files (comma or tab delimited text).

The program can read data stored in the following file formats:

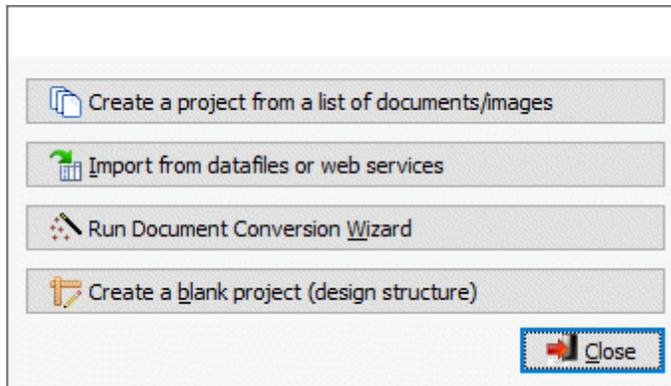
- MS Access
- MS Excel
- Comma Separated Values
- Tab Separated Values
- SPSS
- Stata (v8 to v16)
- Triple-S 1.2 and 2.0 XML file (an XML standard to exchange survey data)
- QSR N6 project file
- QSR NVivo 7 to 11
- Atlas.ti 5.x and 6.x hermeneutic unit
- HyperResearch 2.x
- Ethnograph 5.x project file (document, codebook and coding only)
- Transcriber
- Transana 2.x XML files
- EndNote
- MBox and EML email file formats
- MS Outlook accounts and PSD data files
- Reference Information System (RIS) data files
- ODBC

It can also import data from various Internet database and social media services such as:

- SurveyMonkey
- Qualtrics
- QuestionPro
- SurveyGizmo
- Voxco
- Zotero
- Mendeley
- Twitter
- RSS Feeds
- Gmail
- Hotmail
- Outlook

To import data from any of these applications:

- Select the **NEW** command from the **PROJECT** menu. A dialog box similar to the one below box will appear.



- Click the **Import from datafiles or webservices** button.
- Select the desired file format from the menu. An import dialog box will appear.
- Select the file you want to import.
- Click **OK**.

We will now discuss the specific file formats in greater detail, including formatting requirements (if applicable), supported features and limitations.

ASCII Data Files

QDA Miner will read up to 2000 numeric and alphanumeric variables from a plain ASCII file (text file). The file must have the following format:

- Every line must end with a carriage return.
- The first line must include the variable names, separated by spaces, tabs and/or commas.
- Variable names may not be longer than ten characters. Longer strings are truncated at ten characters.
- The remaining lines must include alphanumeric or numeric scores separated by spaces, tabs and/or commas.
- Each line must contain data for one case; variables must be in the same order for all cases.
- All invalid scores and all blanks encountered between commas or tabs are treated as missing values. A single dot can also be used to represent a missing value.
- Comments can be inserted anywhere in the file by putting an asterisk (' * ') at the beginning of the line.
- Blank lines can also be inserted anywhere in the file.

Excel Data Files

In an Excel spreadsheet you can enter both numeric and alphanumeric data in the cells of a data grid. QDA Miner can import spreadsheet files created by MS Excel *.xls and *.xlsx files.

When you select an Excel file format for importation, the program displays a dialog box in which you can specify the spreadsheet page and the range of cells where the data are located. You must specify a valid range name or provide upper left and lower right cells, separated by two periods (such as A1..H20). If you set the Range Name list box to ALL, the program attempts to read the whole page.

Formatting Spreadsheet Data:

The selected range must be formatted so that the columns of the spreadsheet represent variables (or fields), while the rows represent cases or records. As well, the first row should preferably contain the variable names, while the remaining rows should hold the data, one case per row. QDA Miner will automatically determine the most appropriate format based on the data that it finds in the worksheet columns. Cells in the first row of the selected range are treated as field names. If no variable name is encountered, QDA Miner will automatically provide one for each column in the defined range.

MS Access Database Files

When you select a MS Access data file, the program displays a dialog box in which you can specify the table where the data are located. Once the table has been selected, click the **IMPORT** button to import the data file.

Atlas.ti Hermeneutic Unit

To import an Atlas.ti project, follow these instructions:

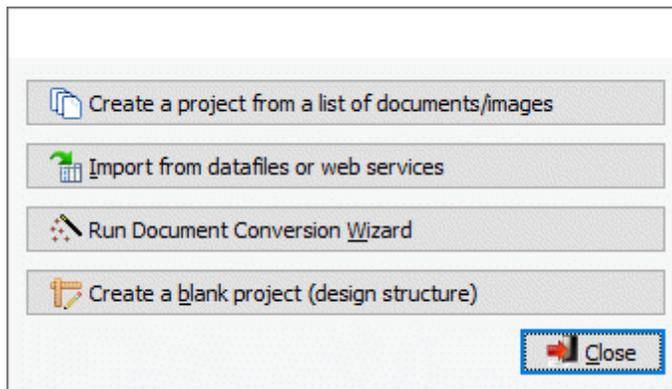
- In Atlas-ti, open the project you want to import into QDA Miner.
- Run the **XML | EXPORT HU to XML** command from the **TOOLS** menu.
- When asked when you want to include documents and quotations, click **YES**.
- Select **FILE** as the output destination and click **OK**. A Save File dialog box will appear.
- Change the name of the XML file so that it has the same name as the project file but with an XML file extension (you may need to remove the "hu_" prefix). Save this file in the same folder as the original .HPR5 or .HPR6 file.
- Close Atlas-ti.
- Open QDA Miner, run the QDA Miner importation routine and select either the .HPR5 or .HPR6 file or the newly created .XML file.

Importing from Web Surveys

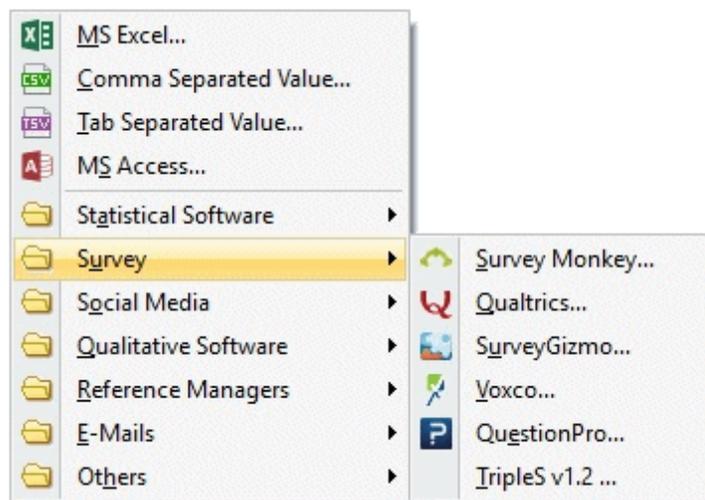
QDA Miner allows you to import survey data directly from various web survey platforms, enabling you to analyze open-ended responses, using both the computer assisted qualitative coding features of QDA Miner and the text mining and content analysis features of WordStat. Importing open-ended and closed-ended questions permits you to quickly compare results by demographics and find out how they are related to ratings, or any other numeric, categorical or date variables.

Creating a New Project Using Survey Data

- Select the **NEW** command from the **PROJECT** menu. This command calls up a dialog box similar to the one below.



- Select the **Import from datafiles or web services** button. A menu will appear on the right-hand side of the dialog box.



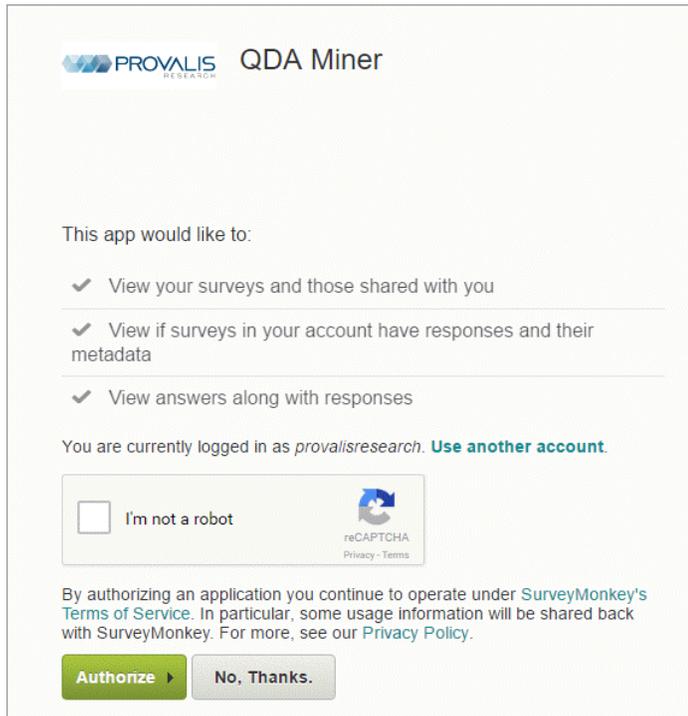
- Scroll down to the **SURVEY** menu item and choose the survey platform from which you wish to import the data.

QDA Miner supports SurveyMonkey, Qualtrics, SurveyGizmo, Voxco, and QuestionPro survey platforms. It also supports TripleS v1.2 survey files. Importing data from the various survey platforms is generally done in a similar fashion. You will be asked to log in to your account or provide a token before importing survey data. QuestionPro, Qualtrics and Voxco survey platforms require tokens to import data into QDA Miner.

SurveyMonkey

Connecting to SurveyMonkey

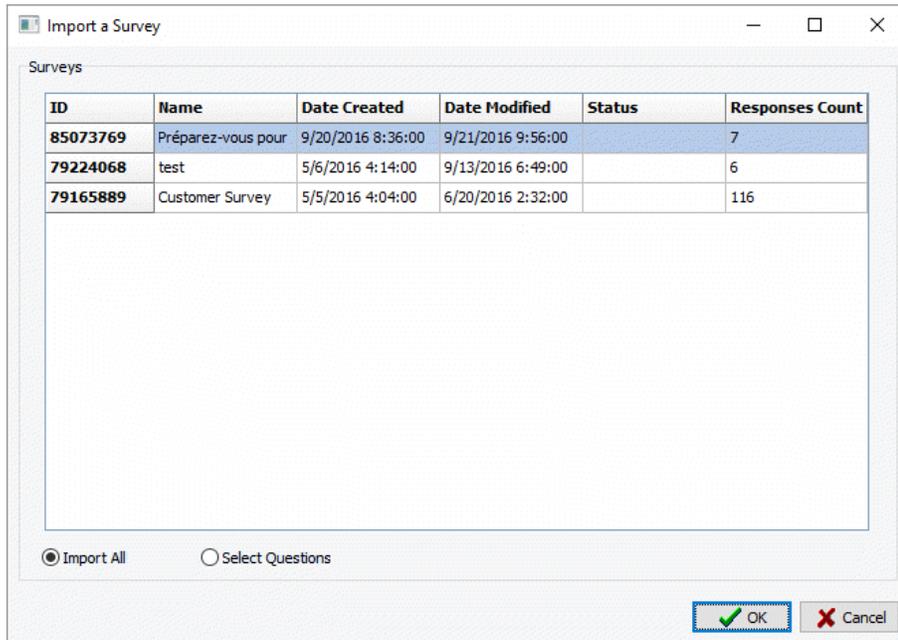
- Select **SURVEY | SURVEYMONKEY** from the menu. You will be prompted to log in to your SurveyMonkey account.
- Log in to your account. A dialog box requesting authorization for QDA Miner to access your account will appear.



- Select the **I'm not a robot** checkbox and perform the requested task.
- Click **Authorize**.

Importing SurveyMonkey Survey Data

Once a connection has been established an **Import a Survey** dialog box will appear.



The dialog box lists the **ID**, **Name**, **Date Created**, **Date Modified**, **Status** and the **Response Count** of each survey on the platform.

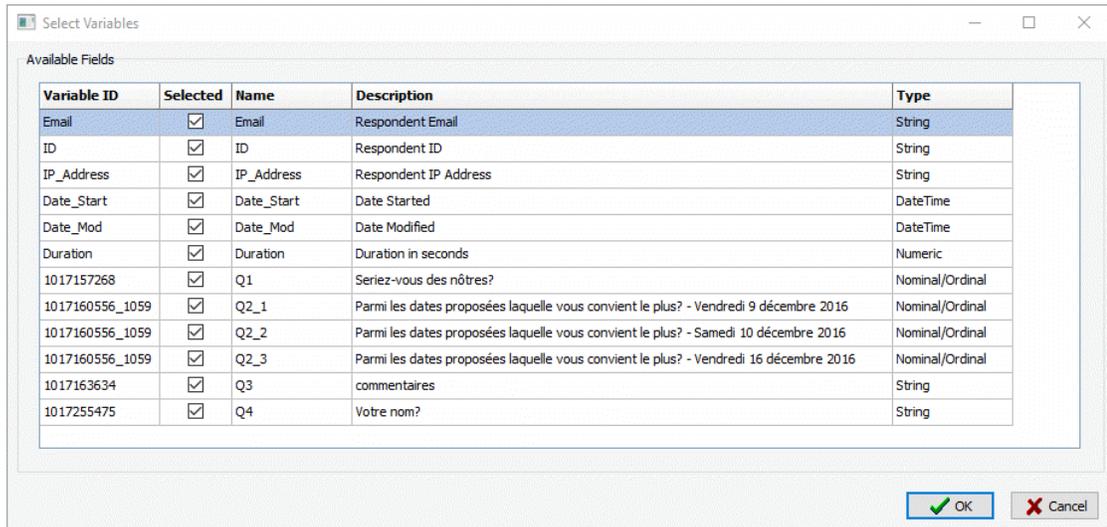
- Choose the survey that you wish to analyze. You have two options. You can import all questions from the survey or you can select specific survey questions that are relevant for your analysis.

To import all survey questions:

- Select the **Import All** radio button at the bottom of the dialog box.
- Click **OK**.
- Choose a name for your project and save it in the appropriate location. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your survey data.

To import only specific questions:

- Select the **Select Questions** radio button at the bottom of the dialog box.
- Click **OK**. A dialog box like the one below will appear.



- The **Variable IDs** will become your project variables. Select the checkboxes of the variables you wish to import.
- Click **OK**.
- Choose a name for your project and save it in the appropriate location. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your survey data.

If you would like to append new survey responses to your project see the [Monitoring Online Resources](#) section of this manual.

Qualtrics

Connecting to Qualtrics

You must enter a token to link with your Qualtrics survey. To get your Qualtrics token:

- Log in to your Qualtrics account.
- Go to the **Account Settings** menu item in the **User** drop-down menu.
- Go to the **Qualtrics IDs**.
- Click **Generate** to receive a token.

How to Find Your Token

1. Login to Qualtrics
2. Go to Account Settings in the user dropdown
3. Go to Qualtrics IDs
4. Click Generate if you haven't generated your token yet

Generate Token

If you already have an API token, "Generate Token" will replace it with a new one. Any existing API calls will not work until they are updated to use the new token.

- In QDA Miner, select **SURVEY | QUALTRICS** from the menu.
- Enter your token in the **Connect to Qualtrics** dialog box.

Connect to Qualtrics

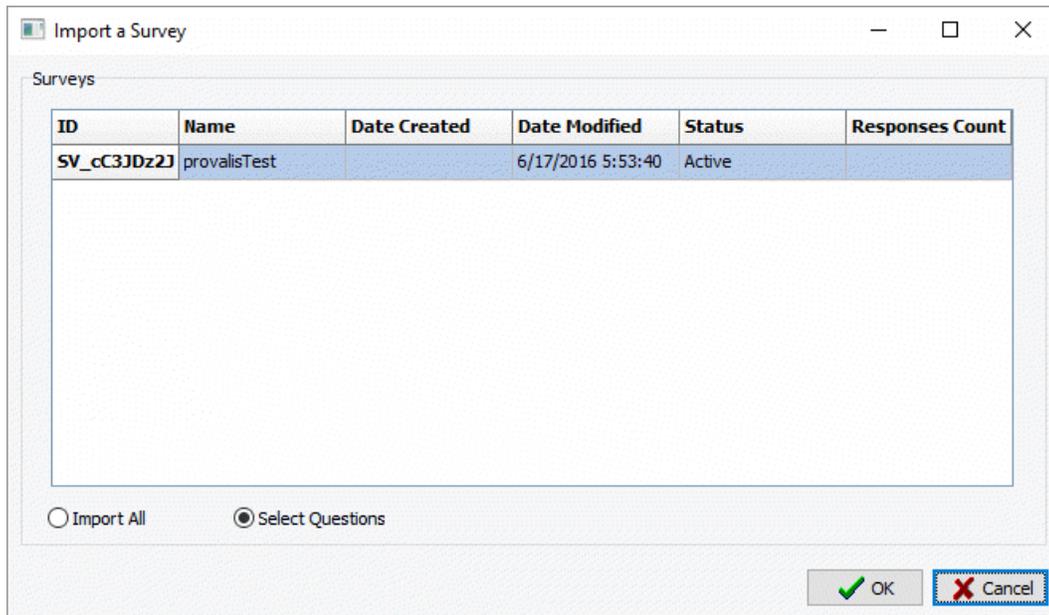
Token

OK Cancel

- Click **OK**.

Importing Qualtrics Survey Data

Once a connection has been established an **Import a Survey** dialog box will appear.



The dialog box lists the **ID**, **Name**, **Date Created**, **Date Modified**, **Status** and the **Response Count** of each survey on the platform.

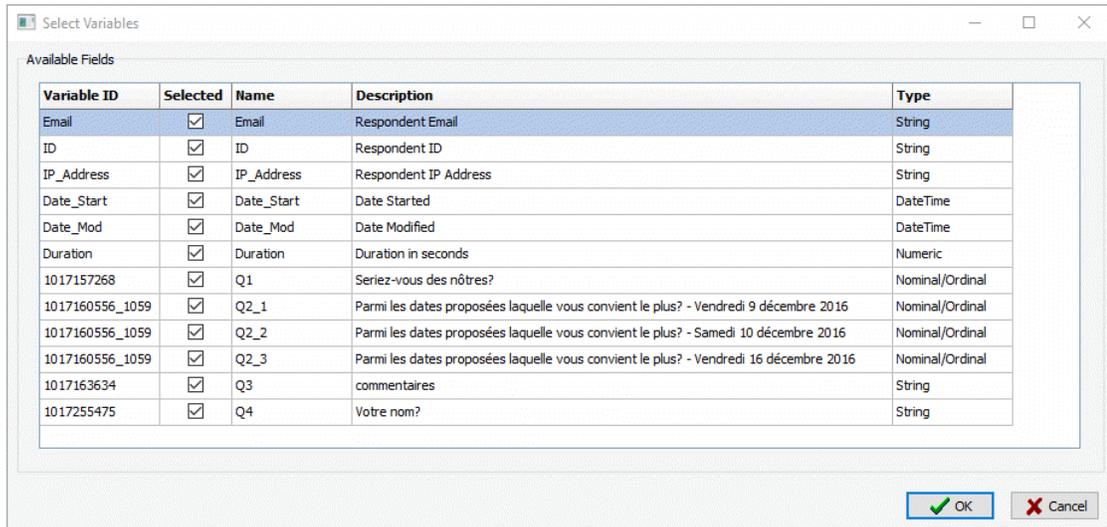
- Choose the survey that you wish to analyze. You have two options. You can import all questions from the survey or you can select specific survey questions that are relevant for your analysis.

To import all survey questions:

- Select the **Import All** radio button at the bottom of the dialog box.
- Click **OK**.
- Choose a name for your project and save it in the appropriate location. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your survey data.

To import only specific questions:

- Select the **Select Questions** radio button at the bottom of the dialog box.
- Click **OK**. A dialog box like the one below will appear.



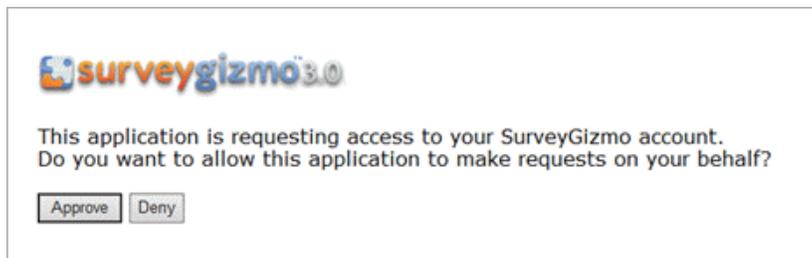
- The **Variable IDs** will become your project variables. Select the checkboxes of the variables you wish to import.
- Click **OK**.
- Choose a name for your project and save it in the appropriate location. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your survey data.

If you would like to append new survey responses to your project see the [Monitoring Online Resources](#) section of this manual.

SurveyGizmo

Connecting to SurveyGizmo

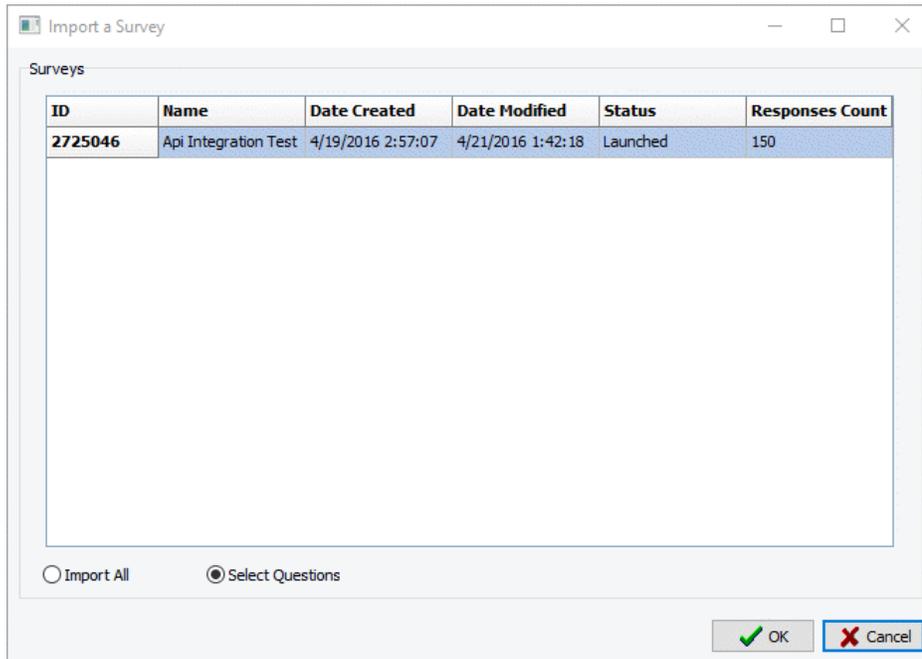
- Select **SURVEY | SURVEYGIZMO** from the menu. You will be prompted to log in to your SurveyGizmo 3.0 account.
- Log into your account. A dialog box requesting authorization for QDA Miner to access your account will appear.



- Click **Approve**.

Importing SurveyGizmo Survey Data

Once a connection has been established **Import a Survey** dialog box will appear.



The dialog box lists the **ID**, **Name**, **Date Created**, **Date Modified**, **Status** and the **Response Count** of each survey on the platform.

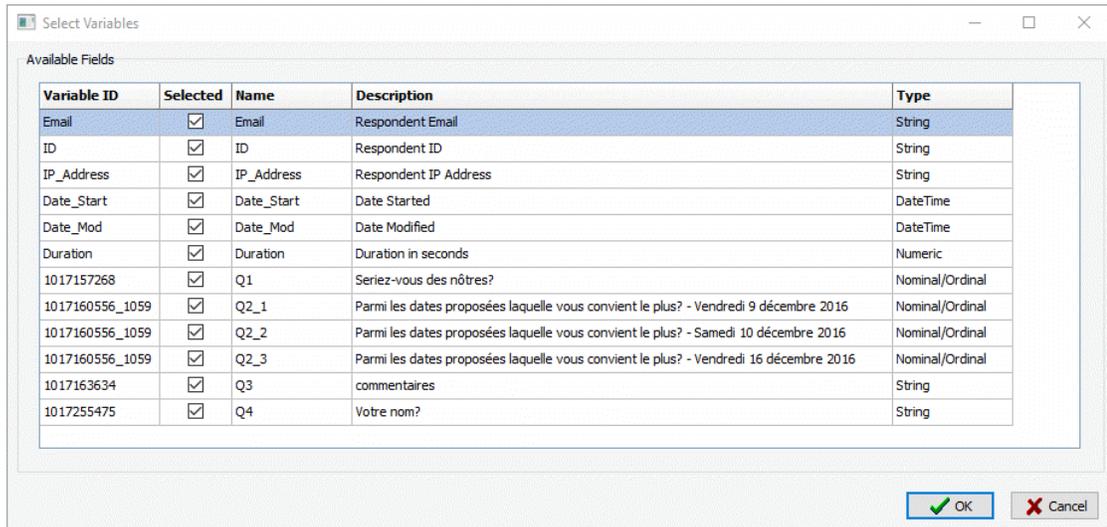
- Choose the survey that you wish to analyze. You have two options. You can import all questions from the survey or you can select specific survey questions that are relevant for your analysis.

To import all survey questions:

- Select the **Import All** radio button at the bottom of the dialog box.
- Click **OK**.
- Choose a name for your project and save it in the appropriate location. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your survey data.

To import only specific questions:

- Select the **Select Questions** radio button at the bottom of the dialog box.
- Click **OK**. A dialog box like the one below will appear.



- The **Variable IDs** will become your project variables. Select the checkboxes of the variables you wish to import.
- Click **OK**.
- Choose a name for your project and save it in the appropriate location. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your survey data.

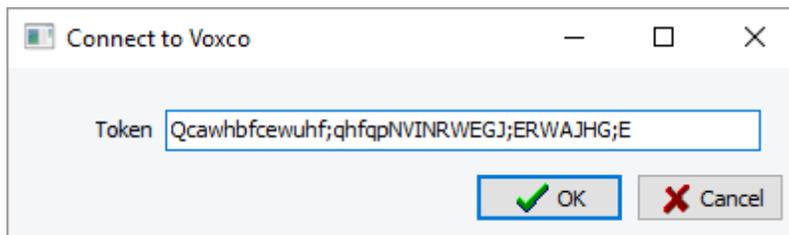
If you would like to append new survey responses to your project see the [Monitoring Online Resources](#) section of this manual.

Voxco

Connecting to Voxco

You must enter a token to link to your Voxco survey. To get your Voxco token:

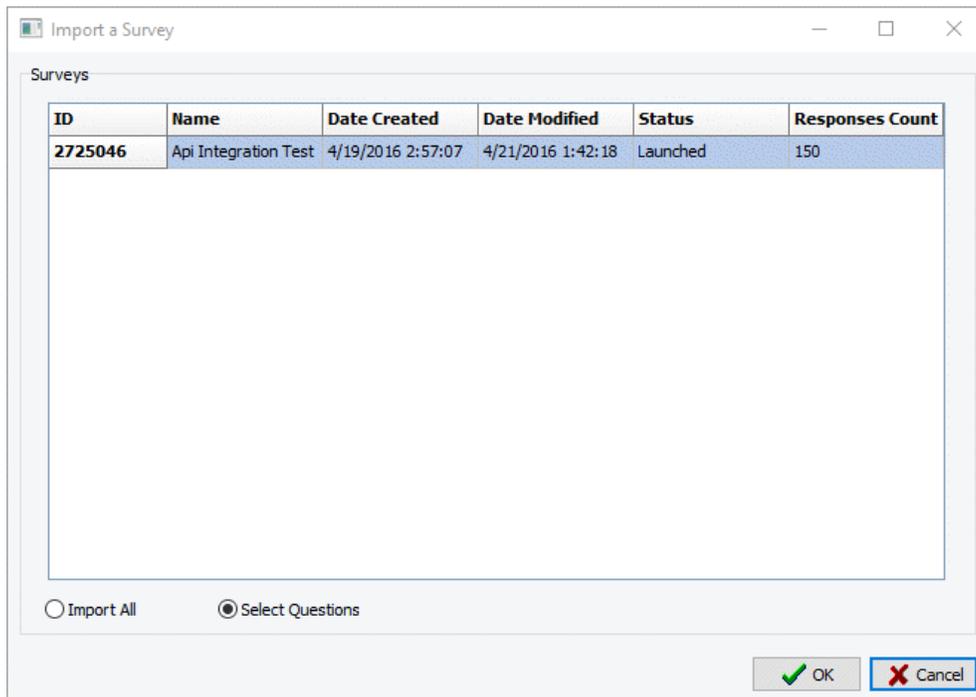
- Log in to your account on Voxco's A4s platform.
- Select **User Settings** from the **User** drop-down menu.
- On the **User Settings** page you will find the **API Access Key** in the list of **Security** options. Copy this token.
- In QDA Miner, select **SURVEY | VOXCO** from the menu.
- Enter your token into the **Connect to Voxco** dialog box.



- Click **OK**.

Importing Voxco Survey Data

Once a connection has been established **Import a Survey** dialog box will appear.



The dialog box lists the **ID**, **Name**, **Date Created**, **Date Modified**, **Status** and the **Response Count** of each survey on the platform.

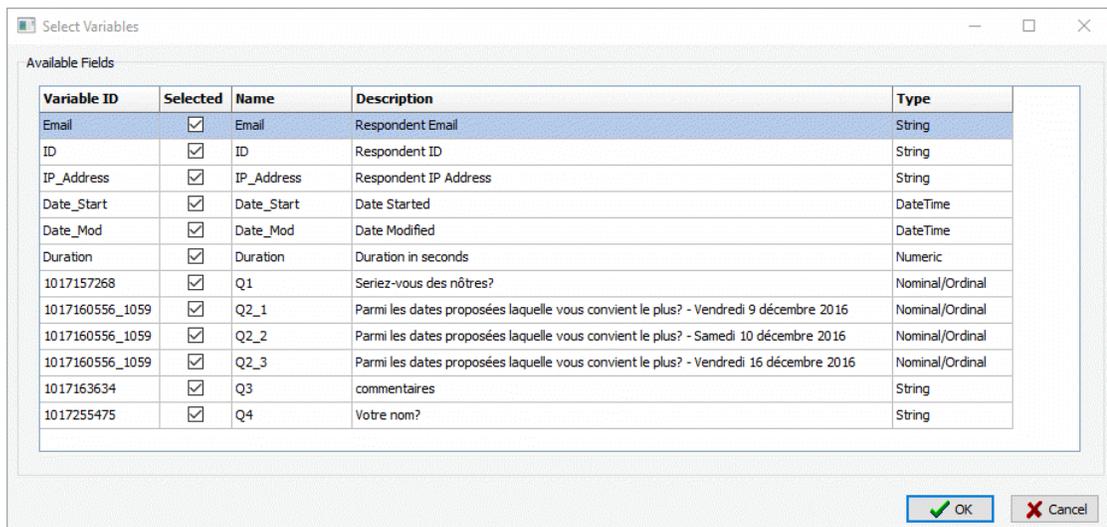
- Choose the survey that you wish to analyze. You have two options. You can import all questions from the survey or you can select specific survey questions that are relevant for your analysis.

To import all survey questions:

- Select the **Import All** radio button at the bottom of the dialog box.
- Click **OK**.
- Choose a name for your project and save it in the appropriate location. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your survey data.

To import only specific questions:

- Select the **Select Questions** radio button at the bottom of the dialog box.
- Click **OK**. A dialog box like the one below will appear.



- The **Variable IDs** will become your project variables. Select the checkboxes of the variables you wish to import.
- Click **OK**.
- Choose a name for your project and save it in the appropriate location. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your survey data.

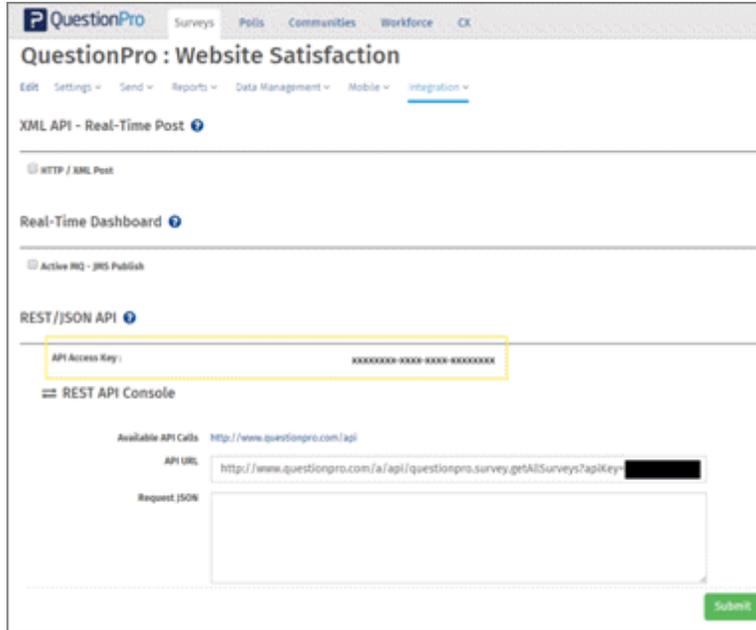
If you would like to append new survey responses to your project see the [Monitoring Online Resources](#) section of this manual.

QuestionPro

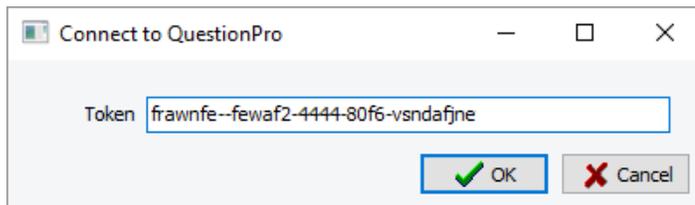
Connecting to QuestionPro

You must enter a token to link to your QuestionPro survey. To get your QuestionPro token:

- Log in to your QuestionPro account.
- Select **Surveys** from the navigation bar at the top of the screen.
- Select the survey you wish to import.
- Click on **Developer API** in the **Integration** drop-down menu. The **API Access Key** is your token.



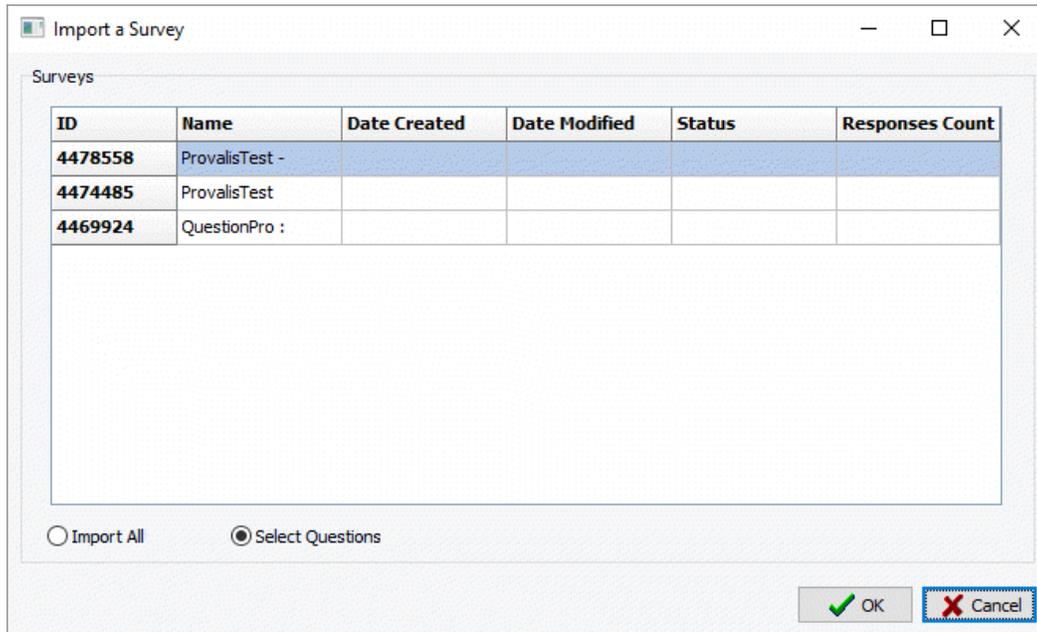
- In QDA Miner, select **SURVEY | QUESTIONPRO** from the menu.
- Copy and paste this key into the **Connect to QuestionPro** dialog box.



- Click **OK**.

Importing QuestionPro Survey Data

Once a connection has been established **Import a Survey** dialog box will appear.



The dialog box lists the **ID**, **Name**, **Date Created**, **Date Modified**, **Status** and the **Response Count** of each survey on the platform.

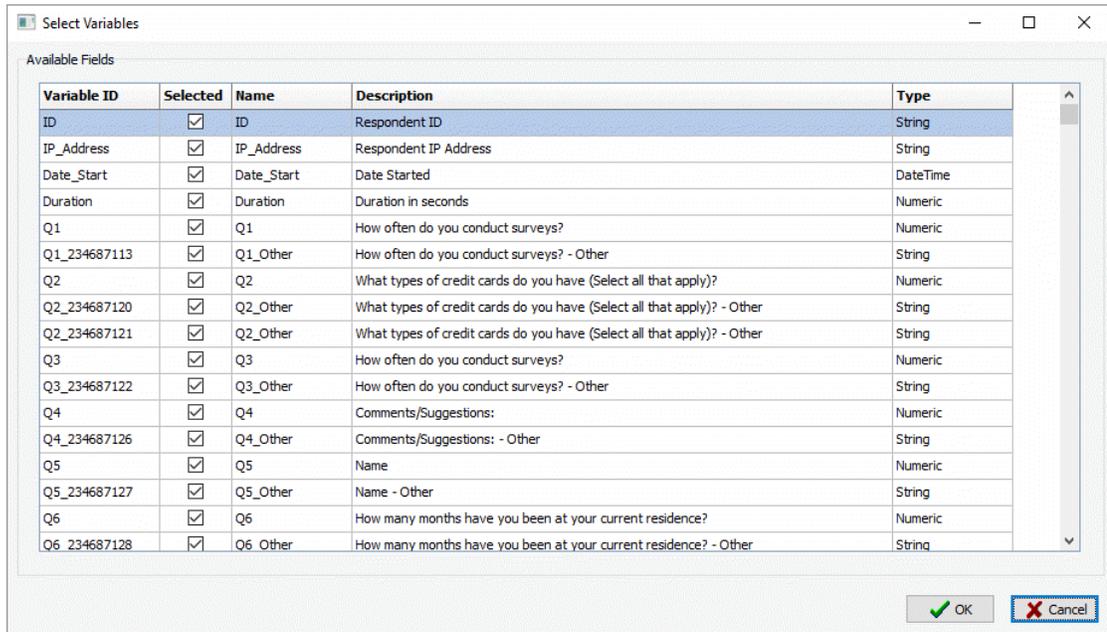
- Choose the survey that you wish to analyze. You have two options. You can import all questions from the survey or you can select specific survey questions that are relevant for your analysis.

To import all survey questions:

- Select the **Import All** radio button at the bottom of the dialog box.
- Click **OK**.
- Choose a name for your project and save it in the appropriate location. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your survey data.

To import only specific questions:

- Select the **Select Questions** radio button at the bottom of the dialog box.
- Click **OK**. A dialog box like the one below will appear.



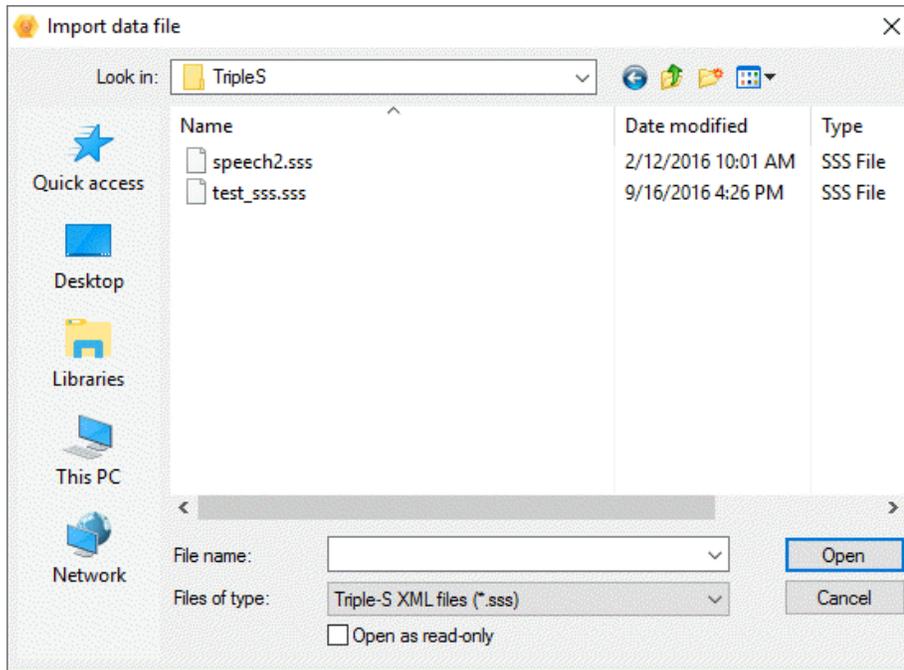
- The **Variable IDs** will become your project variables. Select the checkboxes of the variables you wish to import.
- Click **OK** and the selected questions will be imported into your project.
- Choose a name for your project and save it in the appropriate location. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your survey data.

If you would like to append new survey responses to your project see the [Monitoring Online Resources](#) section of this manual.

TripleS v.1.2

Importing TripleS v1.2 files

- Select **SURVEY | TRIPLES V1.2** from the menu. An **Import data file** dialog box will appear.



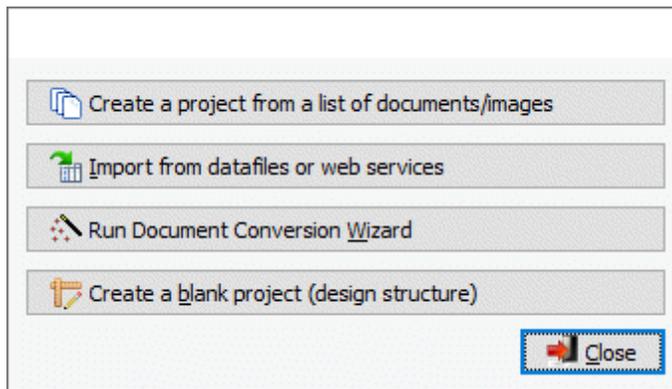
- Choose the triple-s file that you would like to import.
- Click **Open**.
- Choose a name for your project and save it in the appropriate location. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your survey data.

Importing from Social Media

Social media is a popular networking and marketing medium. Many companies, organizations, public figures etc. have a social media presence. QDA Miner allows you to import social media data directly from various social media platforms, allowing you to use both the computer assisted qualitative coding features of QDA Miner and the text mining and content analysis features of WordStat to analyze and monitor this social media data over time.

Creating a New Project Using Social Media Data

- Select the **NEW** command from the **PROJECT** menu. This command calls up a dialog box similar to the one below.



- Select the **Import from datafiles or web services** button. A menu will appear on the right-hand side of the dialog box.
- Scroll down to the **SOCIAL MEDIA** menu item and choose the social media platform from which you wish to import the data.

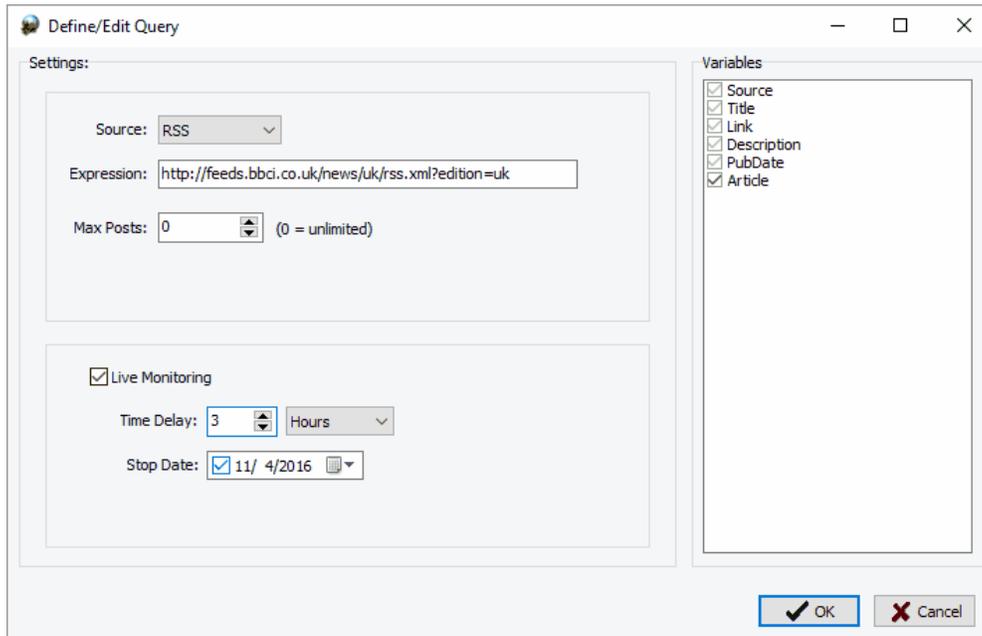
QDA Miner supports RSS, Twitter and Facebook pages. You must have access to a Twitter account to use the Twitter importation feature.

Importing from RSS

QDA Miner allows you to create projects by importing RSS feeds and use the computer assisted qualitative coding features of QDA Miner and the text mining and content analysis features of WordStat to analyze and monitor your RSS sources over time.

Creating a New Project Using a RSS Feed

- Select **SOCIAL MEDIA | RSS FEED** from the menu. A **Define Query** dialog box will appear.



- Select **RSS** as the **Source** of your data import.
- Copy the URL of the RSS feed of your choice into the **Expression** field.
- The **Max Posts** field will be set to 0 by default, which will give you an unlimited number of results. You can limit the amount of RSS data collected by changing the number in the **Max Posts** field.
- The **Source**, **Title**, **Link**, **Description** and **PubDate** variables in the **Variables** list box are grayed out as they are imported into the project by default. Check the **Article** checkbox from the **Variables** list box if you would like to import the full text of the article in a document variable.
- The **Live Monitoring** option instructs QDA Miner to monitor the RSS feed over time and collect for import RSS posts published after the initial data capture. Enabling this option calls the Web Collector, an external tool, which collects your RSS data. You can access the Web Collector through the system tray and the Windows start menu. When you restart your computer the Web Collector will start automatically and continue collecting data if the query status is active.
- Set the set the **Time Delay** frequency and the **Stop Date**. The Web Collector will collect new RSS posts published according to the selected time interval until the stop date is reached. Data will be collected as long as the Web Collector is running. As the Web Collector is a completely separate application QDA Miner does not have to be running for it to work.
- Once all the options have been set, click **OK**.
- Enter the project name and save it in the location of your choosing. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your RSS data.

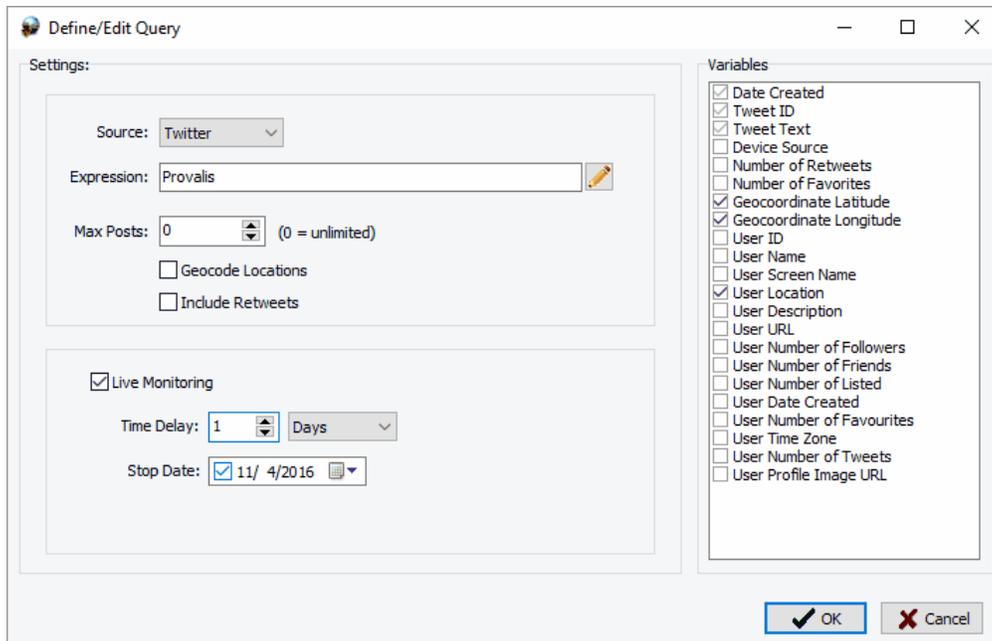
For more information on the **Web Collector** please see the section entitled [Web Collector](#).

Importing from Twitter

QDA Miner allows you to create a project by importing Twitter data and use the computer assisted qualitative coding features of QDA Miner and the text mining and content analysis features of WordStat to analyze and monitor your Twitter sources over time. You must have access to a Twitter account to use this feature.

Creating a New Project Using Twitter Data

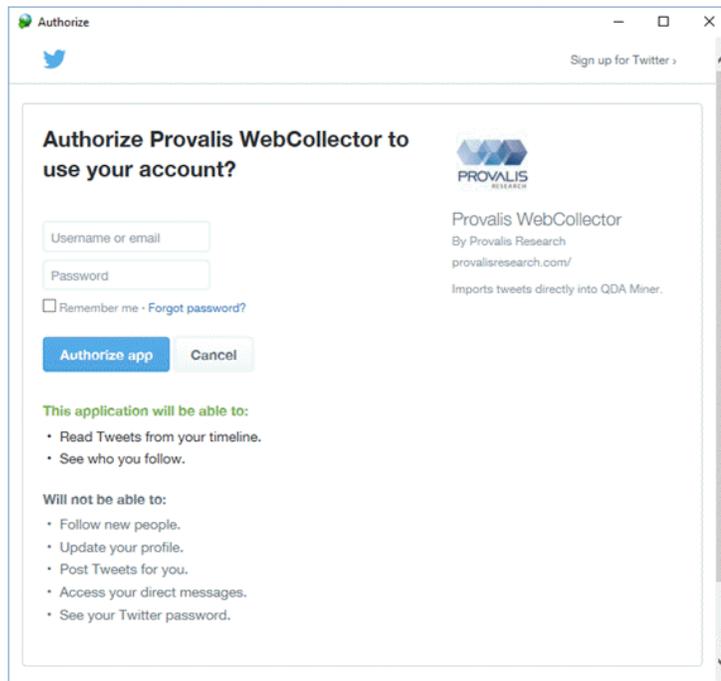
- Select **SOCIAL MEDIA | TWITTER** from the menu. A **Define Query** dialog box will appear.



- Select **Twitter** as the **Source** of your data import.
- Enter your Twitter query in the **Expression** field. You can enter a simple Boolean query directly into this field or you can click the  button to the right of the field and use the advanced search option to help you create your query. The **Build your expression** dialog box is an advanced search option. It mirrors the advanced search in Twitter and works on the same principles.
- The **Max Posts** field will be set to 0 by default, which will give you an unlimited number of results. You can limit the amount of Twitter data collected by changing the number in the **Max Posts** field.
- Check the corresponding boxes to **Include Retweets** and **Geocode locations** in the import if you desire. **Including Retweets** may result duplicate cases. The number of duplicates indicates the virality of the Tweet. Importing **Geocode Locations** will result in the addition of three variables: Longitude, Latitude and User Location. User Location is the user defined. Including these variables in the import allows you to use the **GEOCODING** function to obtain the geographic locations of the users and map them using QDA Miner's mapping feature.
- The **Date Created**, **Tweet ID** and **Tweet Text** variables in the **Variables** list box are grayed out as they are imported into the project by default. Check the variables that you would like to import from the **Variables** list box.
- The **Live Monitoring** option instructs QDA Miner to monitor the Twitter search over time and collect for import Tweets published after the initial data capture. Enabling this option calls the

Web Collector, an external tool, which collects your Twitter data. You can access the Web Collector through the system tray and the Windows start menu. When you restart your computer the Web Collector will start automatically and continue collecting data if the query status is active.

- Set the set the **Time Delay** frequency and the **Stop Date**. The Web Collector will collect new Tweets published according to the selected time interval until the stop date is reached. Data will be collected as long as the Web Collector is running. As the Web Collector is a completely separate application QDA Miner does not have to be running for it to work.
- Click **OK**. If it is the first time you are creating a QDA Miner project from Twitter data, you will need to authorize the Provalis **Web Collector** to connect to your Twitter account. A dialog box like below will appear.



- Enter your log in details and click **Authorize app**.
- Enter the project name and save it in the location of your choosing. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your Twitter data.

Note: Twitter will automatically go back seven days in its database to retrieve information. The maximum number of Tweets accessible each 15 minutes by a single Twitter account is 18,000. If you have reached your limit, the Web Collector will stop and display a dialog box to inform you that you have reached your limit. For more information on the **Web Collector** please see the section entitled [Web Collector](#).

Importing from Facebook

QDA Miner allows you to create a project by importing Facebook page data and use the computer assisted qualitative coding features of QDA Miner and the text mining and content analysis features of WordStat to analyze and monitor your Facebook page sources over time. QDA Miner cannot access data from password protected profiles, only from public pages.

Creating a New Project Using Facebook Page Data

- Select **SOCIAL MEDIA | FACEBOOK** from the menu. A **Define Query** dialog box will appear.

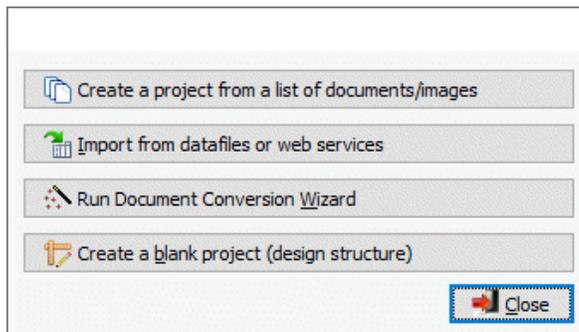
- Select **Facebook** as the **Source** of your data import.
- Enter the URL of the Facebook page you would like to analyze.
- Set the **From** and **Until** date options by clicking the calendar to the right of the fields and selecting start and end date. QDA Miner will retrieve posts that were posted during the chosen time span. This time span must not exceed 6 months. The last possible day of the date range is the present day. **It is not possible to set this option to capture future posts.** Comments associated with the posts will also be imported. Imported comments, however, may have been published after the chosen date range. It is possible to capture future comments by setting the **Live Monitoring** option.
- Check the variables that you would like to import from the **Variables** list box.
- The **Live Monitoring** option instructs QDA Miner to monitor the Facebook posts published during the chosen time period and collect for import any comments associated with the posts that have been published after the initial data capture. Enabling this option calls the Web Collector, an external tool, which collects your Facebook data. You can access the Web Collector through the system tray and the Windows start menu. When you restart your computer the Web Collector will start automatically and continue collecting data if the query status is active. It is important to note that the Web Collector will not collect any new posts, only new comments associated with the posts from the chosen date range.
- Set the set the **Time Delay** frequency and the **Stop Date**. The Web Collector will collect comments published according to the selected time interval until the stop date is reached. Data will be collected as long as the Web Collector is running. As the Web Collector is a completely separate application QDA Miner does not have to be running for it to work.
- Once all the options have been set, click **OK**.
- Enter the project name and save it in the location of your choosing. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your Facebook page data.

Importing from Email Servers

Email has become a major source of communication and may also be used as a cost-efficient data collection tool. As a result, electronic mailboxes often contain a wealth of useful information which may be the basis of a research project. QDA Miner allows you to create a project by importing email data and use the computer assisted qualitative coding features of QDA Miner and the text mining and content analysis features of WordStat to analyze your email data.

Creating a New Project Using Email Data

- Select the **NEW** command from the **PROJECT** menu. This command calls up a dialog box similar to the one below.



- Select the **Import from datafiles or web services** button.
- Select the **E-MAILS** menu item and choose the desired email service from its submenu.

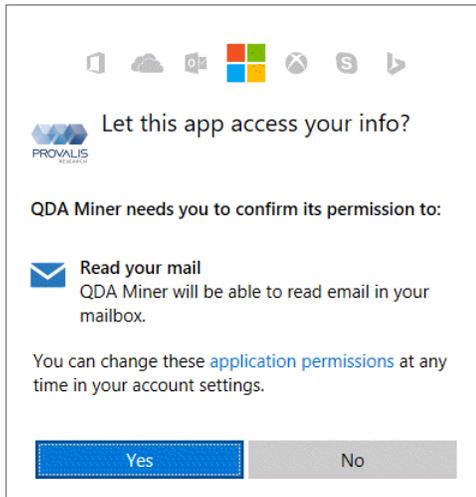
You can create projects from Outlook, Gmail and Hotmail cloud-based email servers. You can also create projects from the Outlook account on your PC and from PST and MBOX files.

Outlook

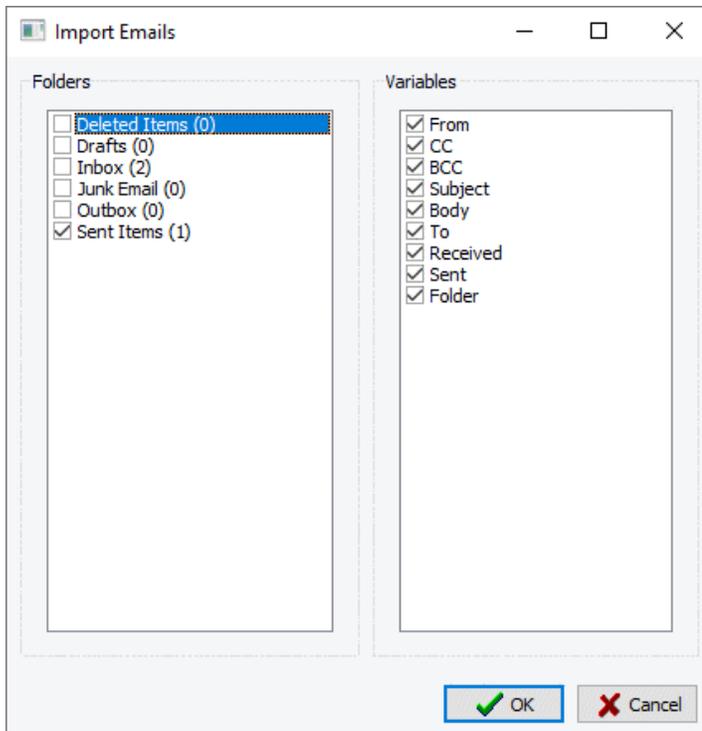
There are three ways to access emails stored in Outlook. You can connect through the Outlook.com email server, connect directly with the outlook application on your computer or import Outlook data contained in PST files. PST files can be imported regardless of whether or not you have access to the account from which they originated. Two examples of when a PST importation could be used are to import backups of old emails or emails that are not yours and for which you don't have access to the email account.

Connecting to Outlook.com

- Select **E-MAILS | OUTLOOK | OUTLOOK.COM** from the menu to log in to Microsoft Outlook's cloud-based email service. A log in dialog box will appear.
- Log in to your Outlook.com account. A permissions dialog box will appear.



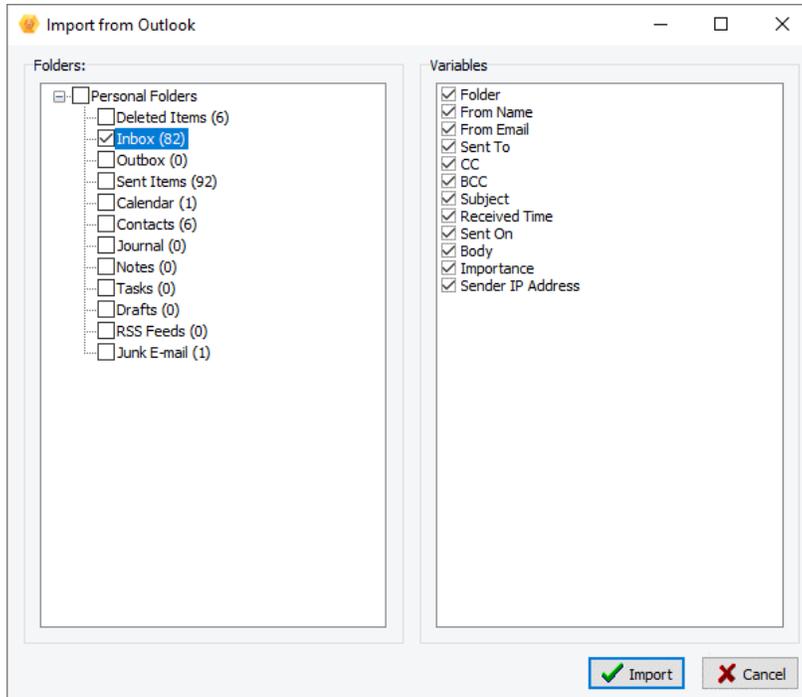
- Click **Yes** if you give permission for QDA Miner to access your account. An **Import Emails** dialog box will appear.



- The items in the **Folders** list box on the left side of the dialog box corresponds to the folders in your email account. Check the **Folders** you wish to import.
- The items in the **Variables** list box on the right side of the dialog box will become project variables if imported. Check the **Variables** you want to include in your project.
- Click **OK**.
- Enter the project name and save it in the location of your choosing. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your email data.

Importing Data from an Outlook Email Application on Your Computer

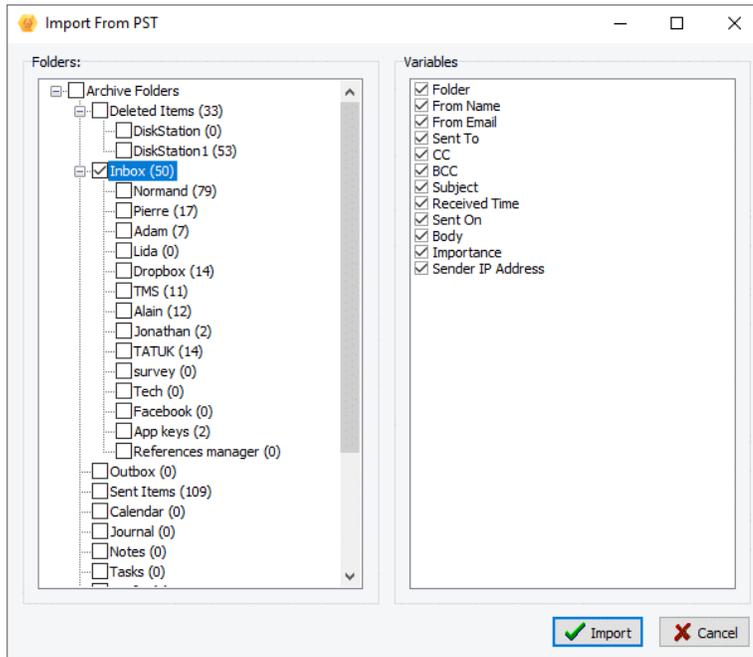
- Select **E-MAILS | OUTLOOK | ACCOUNT** from the menu to import email from the Outlook application that is installed on your computer. An **Import from Outlook** dialog box will appear.



- The items in the **Folders** list box on the left side of the dialog box corresponds to the folders in your email account. Check the **Folders** you wish to import.
- The items in the **Variables** list box on the right side of the dialog box will become project variables if imported. Check the **Variables** you wish to import.
- Click **Import**.
- Enter the project name and save it in the location of your choosing. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your email data.

Importing Data From a PST File

- Select **E-MAILS | OUTLOOK | PST FILE** from the menu to import a file saved on your PC in the Personal Storage Table (*.pst) format. An **Import data file** dialog box will appear.
- Select the PST file you want to import.
- Click **Open**. An **Import from PST** dialog box will appear.



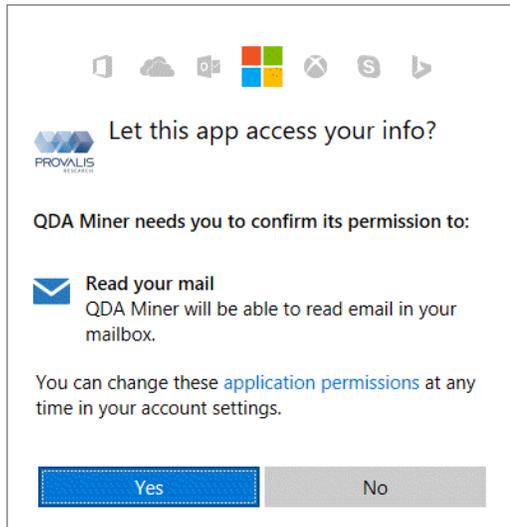
- The items in the **Folders** list box on the left side of the dialog box corresponds to the folders in your email account. Check the **Folders** you wish to import.
- The items in the **Variables** list box on the right side of the dialog box will become project variables if imported. Check the **Variables** you wish to import.
- Click **Import**.
- Enter the project name and save it in the location of your choosing. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your email data.

If you would like to append new emails to your project see the [Monitoring Online Resources](#) section of this manual.

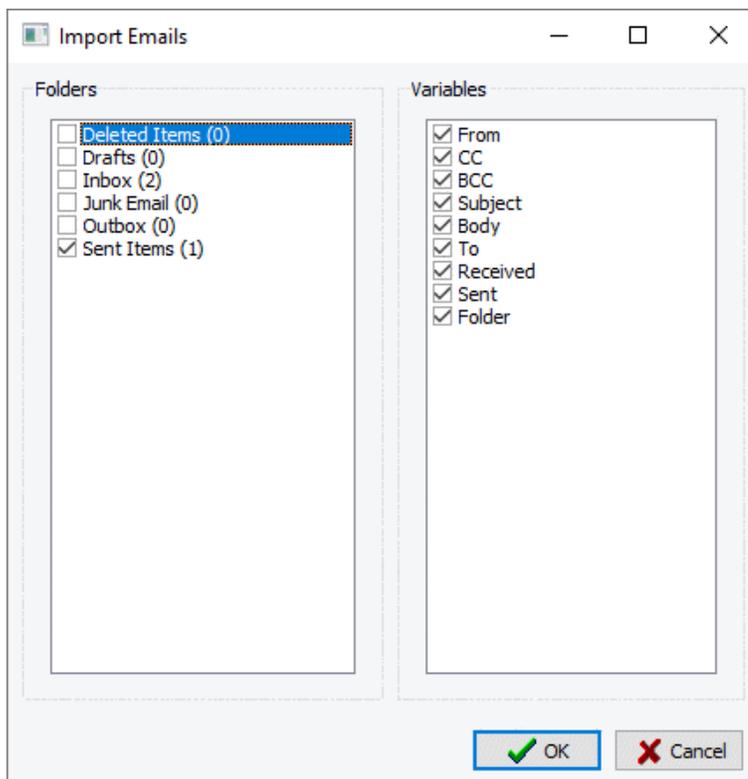
Hotmail

Connecting to Hotmail

- Select **E-MAILS | HOTMAIL** from the menu. A log in dialog box will appear.
- Log in to your Outlook.com account. A permissions dialog box will appear.



- Click **Yes** if you give permission for QDA Miner to access your account and an **Import Emails** dialog box will appear.



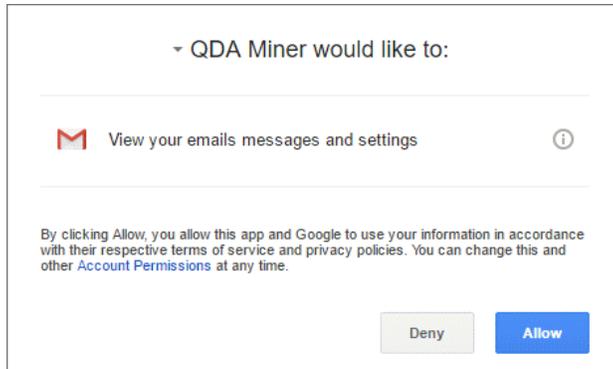
- The items in the **Folders** list box on the left side of the dialog box corresponds to the folders in your email account. Check the **Folders** you wish to import.
- The items in the **Variables** list box on the right side of the dialog box will become project variables if imported. Check **Variables** you want to include in your project.
- Click **OK**.
- Enter the project name and save it in the location of your choosing. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your email data.

If you would like to append new emails to your project see the [Monitoring Online Resources](#) section of this manual.

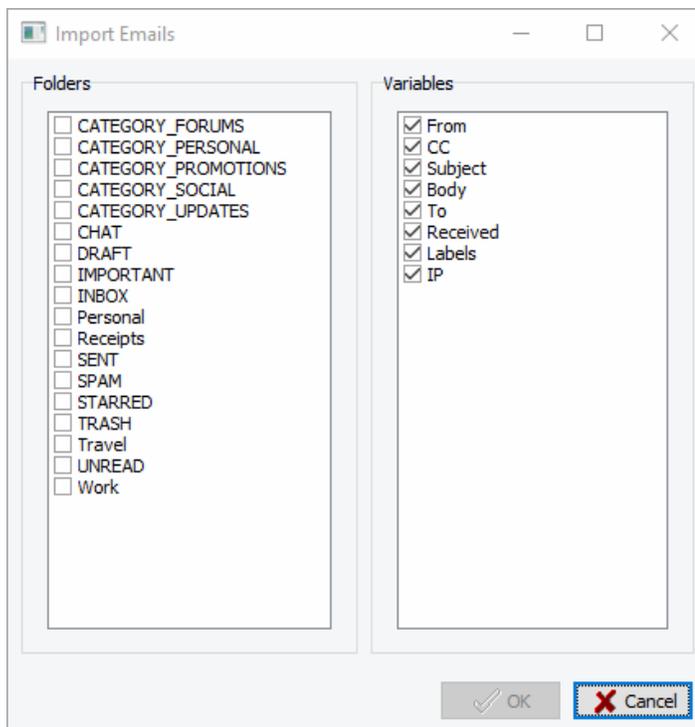
Gmail

Connecting to Gmail

- Select **E-MAILS | GMAIL** from the menu and you will be prompted to log in to your Gmail account.
- Log in to your account. A permissions dialog box will appear similar to the one below.



- Click **Allow** if you give permission for QDA Miner to access your Gmail account. An **Import Emails** dialog box will appear.



- The items in the **Folders** list box on the left side of the dialog box corresponds to the folders in your Gmail account. Check the **Folders** you wish to import.
- The items in the **Variables** list box on the right side of the dialog box will become project variables if imported. Check **Variables** you want to include in your project.

- Click **OK**.
- Enter the project name and save it in the location of your choosing. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your email data.

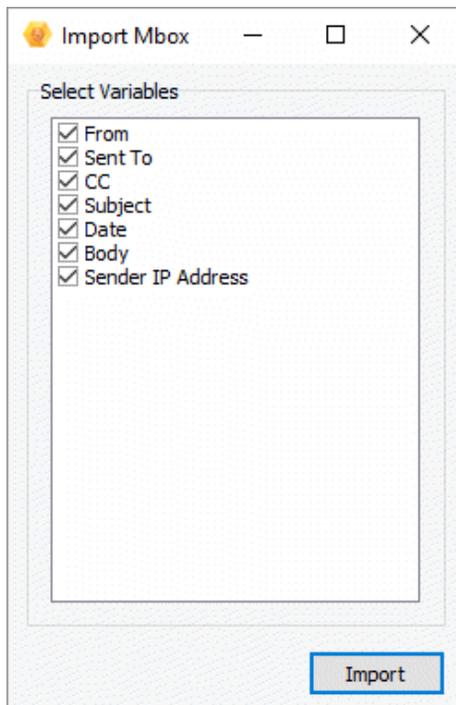
If you would like to append new emails to your project see the [Monitoring Online Resources](#) section of this manual.

MBox

MailBox (*.mbox) is a file extension for a text file used to store email. It was first implemented for Fifth Edition Unix, and though not formally defined by Internet Engineering Task Force (IETF) and the Internet Society (ISOC), it is the most common format for storing email messages on a hard drive. All messages are stored in a single plain text file. Each message starts with a "From" line and ends with a blank line.

Importing Data From a MBOX File

- Choose the **E-MAILS | MBOX** from the menu and **Import data file** dialog box will appear.
- Select the MBOX file that you would like to import.
- Click **Open**.
- Enter the project name and save it in the location of your choosing. An **Import Mbox** box will appear.



- The items in the **Select Fields** list box will become project variables when imported. Select the fields you wish to import.
- Click **Import** and you will be taken to QDA Miner's main workspace to start analyzing your email data.

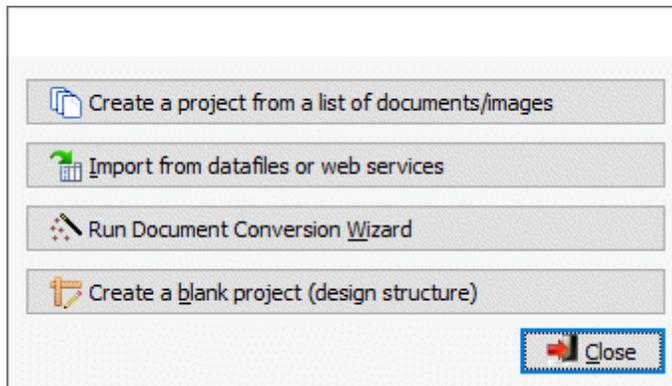
If you would like to append new emails to your project see the [Monitoring Online Resources](#) section of this manual.

Importing Bibliographic References

Reference Management tools are used to store, organize and search bibliographic data, abstracts and complete papers. QDA Miner allows you to create projects by importing bibliographic data and use the computer assisted qualitative coding features of QDA Miner and the text mining and content analysis features of WordStat to effectively analyze your bibliographic data.

Creating a New Project Using Bibliographic Data

- Select the **NEW** command from the **PROJECT** menu. This command calls up a dialog box similar to the one below.



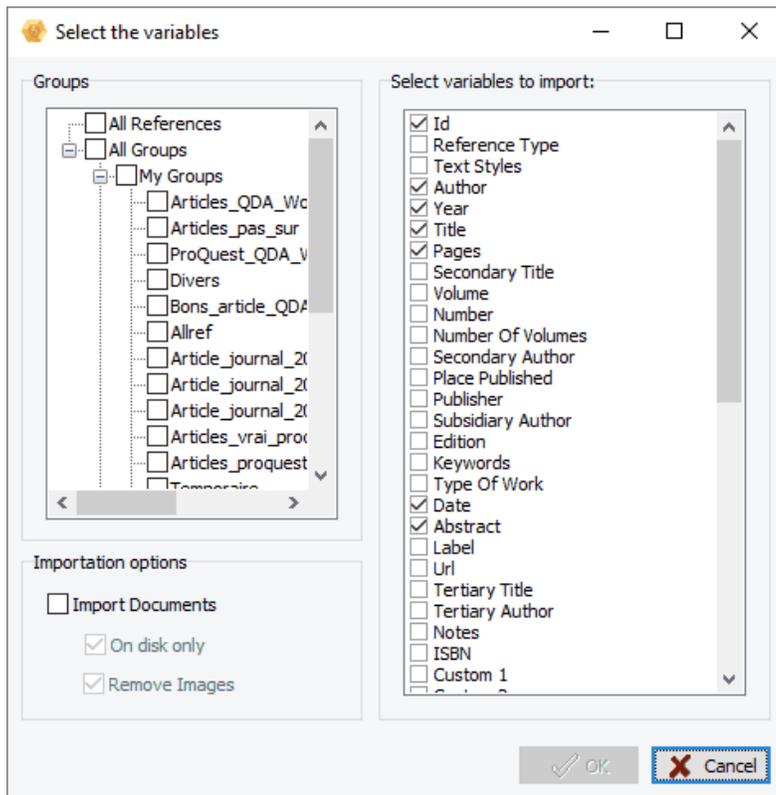
- Select the **Import from datafiles or web services** button.
- Select the **REFERENCE MANAGERS** menu item and choose the desired reference management software from its submenu.

QDA Miner supports EndNote, Mendeley and Zotero. It also supports the RIS (*.ris) file format.

EndNote

Creating a New Project Using EndNote

- Select **REFERENCE MANAGERS | ENDNOTE** from the menu and an **Import data file** dialog box will appear.
- Select the EndNote file that you wish to import.
- Click **Open**.
- Enter the project name, save it in the location of your choosing. A **Select the variables** dialog box will appear.



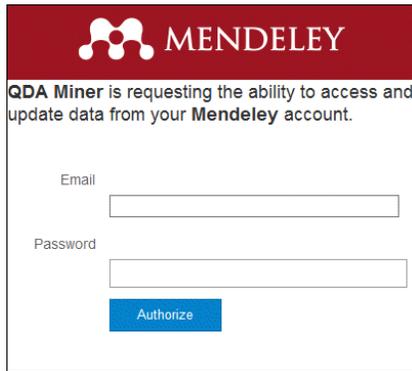
- On the right-hand side of the dialog box is the **Groups** list box. A group in EndNote basically separates your library into categories. Select the check-boxes of the groups you want to import from.
- You are given the option to **Import Documents**. Check the **Import Documents** check box if you would like to import documents.
- Documents in EndNote are saved on disk, URLs that access online documents are also saved within the files. You have the option of importing documents that are saved **On disk only** and ignoring the URLs that point to online documents.
- Check the **Remove Images** checkbox if you would like to remove the images contained in the documents that you are importing.
- On the right side of the dialog box is a list box of variables that you can select for importation. Check the boxes of the variables you wish to import.
- Click **OK**. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your bibliographic data.

If you would like to append bibliographic references to your project see the [Monitoring Online Resources](#) section of this manual.

Mendeley

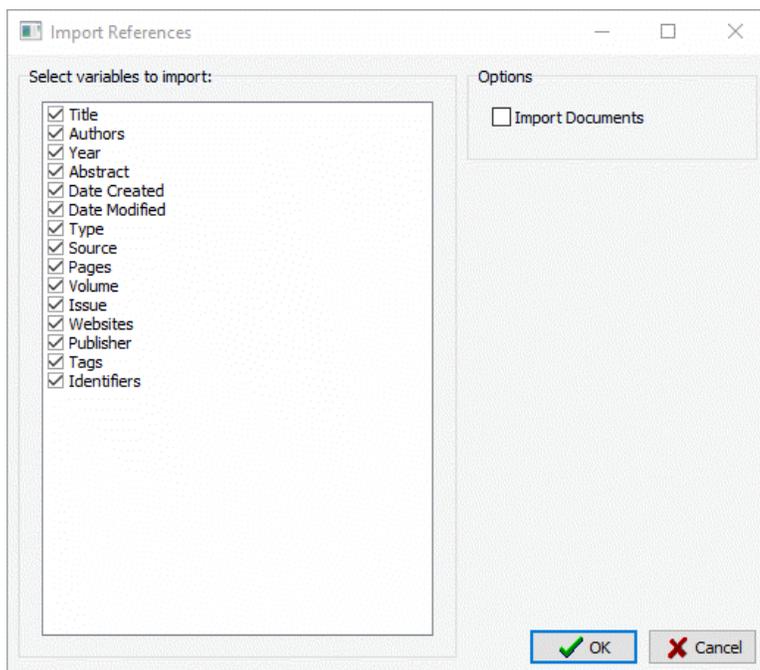
Creating a New Project Using Mendeley

- Select **REFERENCE MANAGERS | MENDELEY** from the menu and a dialog box requesting access to your Mendeley account appears.



The image shows a Mendeley authorization dialog box. At the top, there is a red header with the Mendeley logo and the word "MENDELEY" in white. Below the header, the text reads: "QDA Miner is requesting the ability to access and update data from your Mendeley account." There are two input fields: "Email" and "Password". Below the "Password" field is a blue button labeled "Authorize".

- Enter your **Email** and your **Password**.
- Click **Authorize** if you give permission for QDA Miner to access your account. An **Import References** dialog box will appear.



The image shows the "Import References" dialog box. It has a title bar with "Import References" and standard window controls. The main area is divided into two sections. On the left, under the heading "Select variables to import:", there is a list of variables with checkboxes next to them, all of which are checked: Title, Authors, Year, Abstract, Date Created, Date Modified, Type, Source, Pages, Volume, Issue, Websites, Publisher, Tags, and Identifiers. On the right, under the heading "Options", there is a checkbox labeled "Import Documents" which is currently unchecked. At the bottom right, there are two buttons: "OK" (with a green checkmark icon) and "Cancel" (with a red X icon).

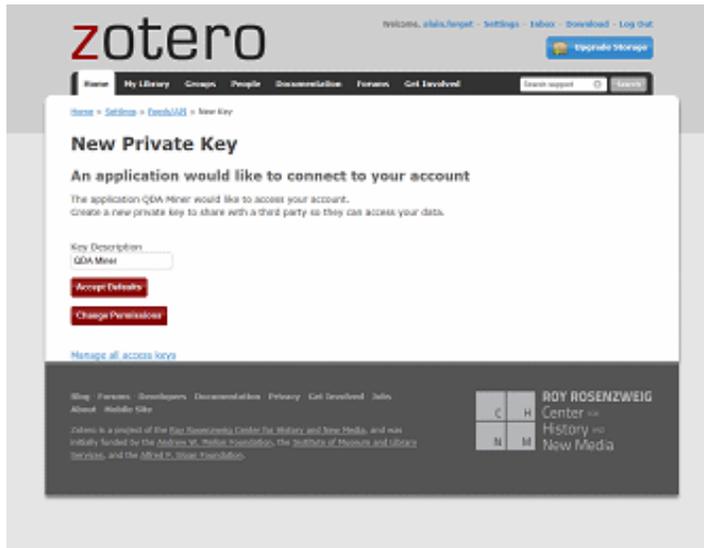
- On the left side of the dialog box is a list box of variables that you can select for importation. Check the boxes of the variables you wish to import.
- On the right-hand side of the dialog box you are given the option to **Import Documents**. Select the **Import Documents** checkbox if you would like to import documents.
- Click **OK**.
- Enter the project name and save it in the location of your choosing. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your bibliographic data.

If you would like to append bibliographic references to your project see the [Monitoring Online Resources](#) section of this manual.

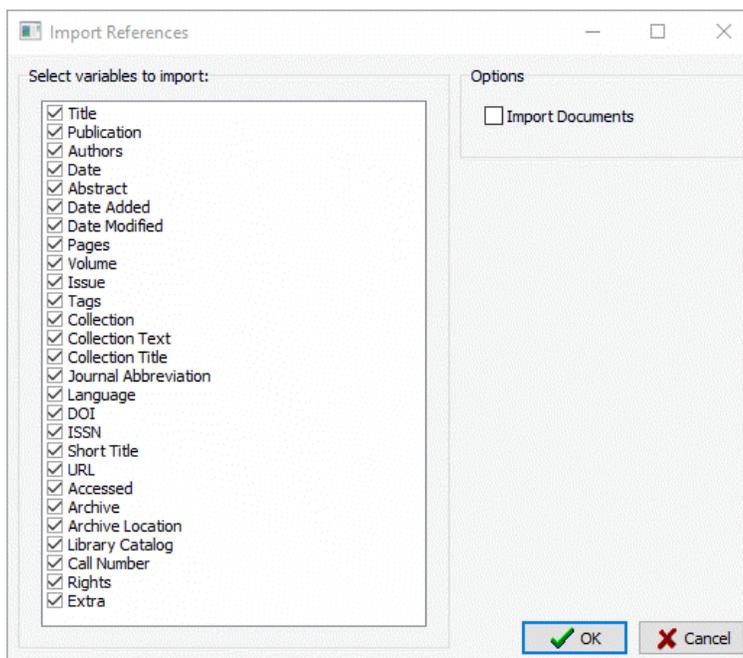
Zotero

Creating a New Project Using Zotero

- Select **REFERENCE MANAGERS | ZOTERO** from the menu and a dialog box asking you to sign in to your Zotero account appears.
- Log in to your Zotero account. A dialog box notifying you that QDA Miner would like to access your account appears.



- Click **Accept Defaults** if you give permission for QDA Miner to access your account. An **Import References** dialog box will appear.



- On the left side of the dialog box is a list box of variables that you can select for importation. Check the boxes of the variables you wish to import.
- On the right-hand side of the dialog box you are given the option to **Import Documents**. Check the **Import Documents** checkbox if you would like to import documents.

- Click **OK**.
- Enter the project name and save it in the location of your choosing. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your bibliographic data.

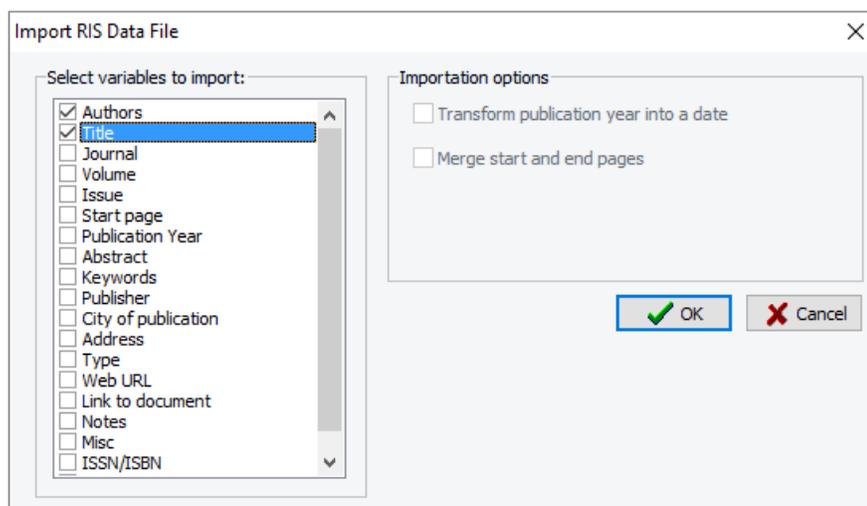
If you would like to append bibliographic references to your project see the [Monitoring Online Resources](#) section of this manual.

RIS File

Creating a New Project from a .RIS File

Bibliographic data from Reference Management tools and digital libraries is often stored in the RIS (*.ris) file format. RIS files are plain-text files and have by default a TXT file extension. To import such a file, set the **Files of type** list box to Reference Information Management (RIS) and then select the file you wish to import. Another approach is to change the file extension to RIS, and QDA Miner will automatically recognize this file extension and import the references in this file without the need to specify the proper file type.

- Once a file has been selected for importation, QDA Miner will display an **Import RIS Data File** dialog box.



The following importation options are available:

Select variables to import: This list box allows you to put check marks beside the variables that you want to import. All unchecked items will be ignored.

Transform publication year into a date: The publication dates in RIS files can consist of a full date, with days and months, or only the year, or sometimes the publication month and year. By default, QDA Miner will import just the publication year and store it in an integer variable. Choosing this option will store all dates into a **Date** variable. If only the year is specified, QDA Miner will set the day and month to January 1. If the publication date consists of a month and a year only, then QDA Miner will set the day to the first day of the month.

Merge start and end pages: By default, start-page and end-page numbers are stored in separate variables. Selecting this option will join both numbers with a hyphen character and store those in a single string variable.

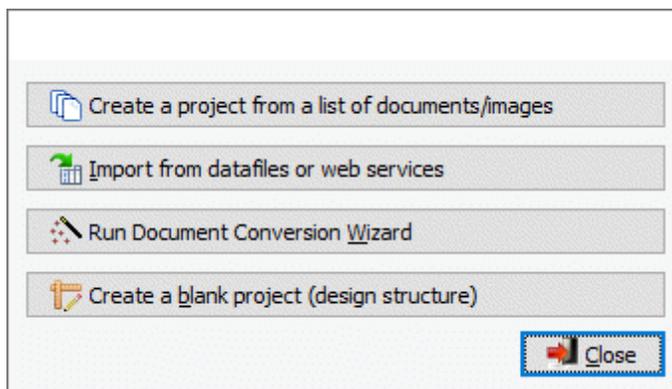
Importing News Transcripts

Monitoring mainstream media, including newspapers, radio and television news bulletins, but also other sources, such as web blogs is essential when one wants to explore media coverage of contemporary issues, perform media framing analysis, manage a company reputation or manage its brand image. QDA Miner allows you to create projects by importing global as well as local news transcripts from Factiva or Nexis UNI aggregation services and use the computer assisted qualitative coding features of QDA Miner and the text mining and content analysis features of WordStat to effectively analyze those news transcripts.

QDA Miner does not connect directly to those services, but instead process output files obtained from those sources, storing each news transcript into a separate case and extracting into variables other relevant information such as the source, the publication date, the author, etc.

Creating a New Project Using Bibliographic Data

- Select the **NEW** command from the **PROJECT** menu. This command calls up a dialog box similar to the one below.



- Select the **Import from data files or web services** button.
- Select the **NEWS** menu item and choose the desired from its submenu.

QDA Miner .

Nexis UNI

Nexis UNI is an online database available mainly in university settings for accessing current and archival news, public records, legal documents, etc., from more than 40,000 expert-curated sources from all over the world. When accessing Nexis UNI one can search sources to retrieve those containing specific keywords in a specific time period. Results may then be narrowed by publication type, country, language, source, industry and many other criteria. After selecting relevant references, one can save up to a maximum of 100 selected documents into a single file, either a PDF, MS Word (.docx) or a Rich Text Format (.rtf). A single news transcript way look like this:

Task force, panel unveil guidelines for coping with COVID-19 crisis

The Japan Times
March 13, 2020 Friday

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Section: SPORTS

Length: 310 words

Byline: STAFF WRITER

Body

Kaz Nagatsuka

While the **COVID-19** outbreak has greatly impacted sports leagues in Japan, the joint task force formed by Nippon Professional Baseball and the J. League and its medical panel introduced proposals to help the leagues and their fans properly cope with the virus.

The objective of the documents is to educate athletes, teams and fans about how to avoid catching an infection from the virus and also lower the risk of spreading it by adapting countermeasures.

The proposals, which were released to the public on Thursday, state that it is important for athletes, coaches and staff "to have courage" to rest when they recognize they have fever, coughs and physical fatigue, and for fans to not come to stadiums when they feel the same symptoms.

For athletes and team personnel, the documents recommend that they monitor their health conditions by routinely checking their body temperature and recording their daily activities. Other tips: be aware about the sanitary conditions in shared spaces like locker rooms, shower rooms and benches.

The proposals advise that if an athlete or a team staff member tests positive for the coronavirus, the person and others in close contact with him or her will be required to be hospitalized or stay home.

NPB has indefinitely delayed the start of the season, and the J. League has extended the suspension for the restart of its season.

According to the proposals, fans would also be asked to refrain from performing some of their customary cheering, such as playing trumpets, blowing whistles and launching rubber balloons into the air.

Meanwhile, at the task force's previous news conference on Monday, the panel said that the basic reproduction number, which is considered an indicator of the contagiousness of infectious and parasitic agents, could be taken into account when deciding whether the leagues should host games.

Classification

Language: ENGLISH

Publication-Type: Newspaper

Subject: SPORTS (91%); PROFESSIONAL SPORTS (90%); SPORTS & RECREATION (90%); WUHAN CORONAVIRUS (90%); VIRUSES (78%); STADIUMS & ARENAS (78%); SPORTS FANS (78%); DISEASE AGENTS & VECTORS (78%); INFECTIOUS DISEASE (78%); BASEBALL (78%); CORONAVIRUSES (78%); MEDICINE & HEALTH (77%); COACHES & TRAINERS (73%); DELAYS & POSTPONEMENTS (65%)

Person: KEN CALVERT (73%)

Geographic: JAPAN (73%)

Load-Date: March 12, 2020

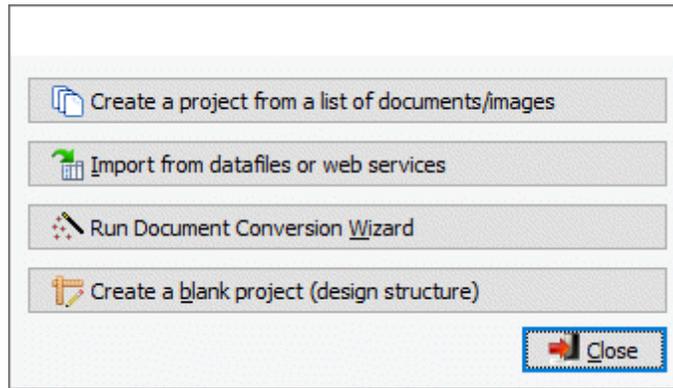
End of Document

A Nexis UNI entry typically has a title at the top, followed by the source, the publication date, its author and other information followed by the original transcript. It also contains below the transcript additional classification information such as language, subject keywords, geographic or industry information and so on. A single file may contain up to a hundred of those transcripts and an online session will often result in the creation of several of those files. Extracting relevant information from all those files can represent a real challenge if performed manually.

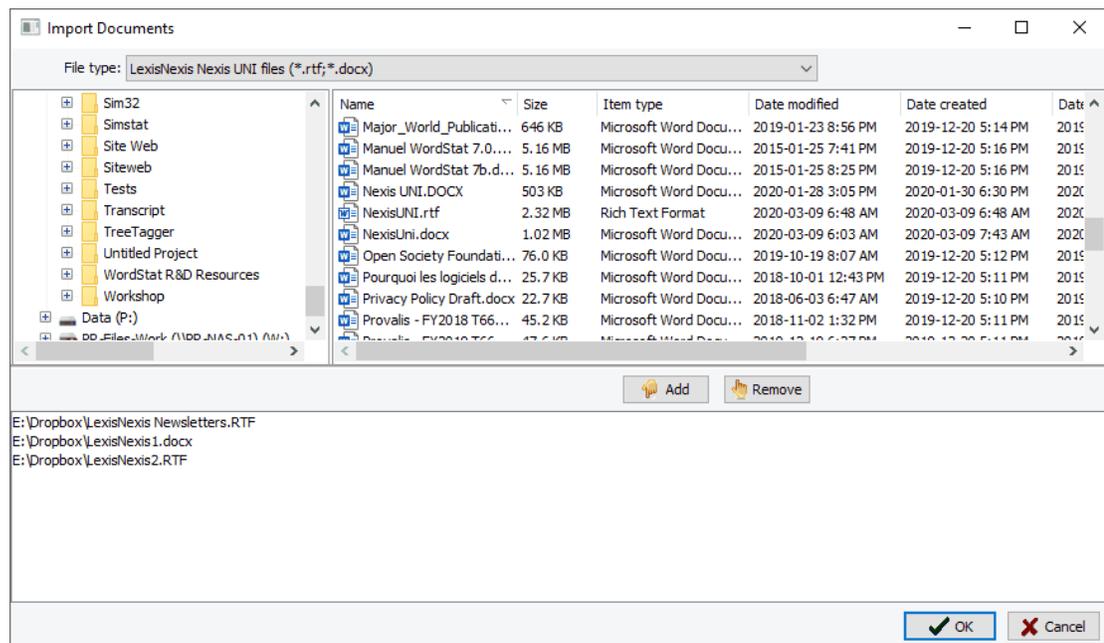
The QDA Miner NEXIS UNI importation routine greatly facilitates this process of information extraction. It can process multiple files, separate each entry and extract from those the various fields storing each transcript in separate cases and associated information in as many variables as needed. Since QDA Miner processes Rich Text Format as well as .DOCX file natively, it is recommended to save the results in either one of these two formats.

To import Nexis UNI files:

- Select the **PROJECT | NEW** command from the QDA Miner main menu, or **CREATE A NEW PROJECT** button from the intro screen. A dialog box similar to the one below box will appear:



- Click the **Import from datafiles or web services** button.
- Select **NEWS | NEXIS UNI** from the menu. A dialog box similar to this one will appear:

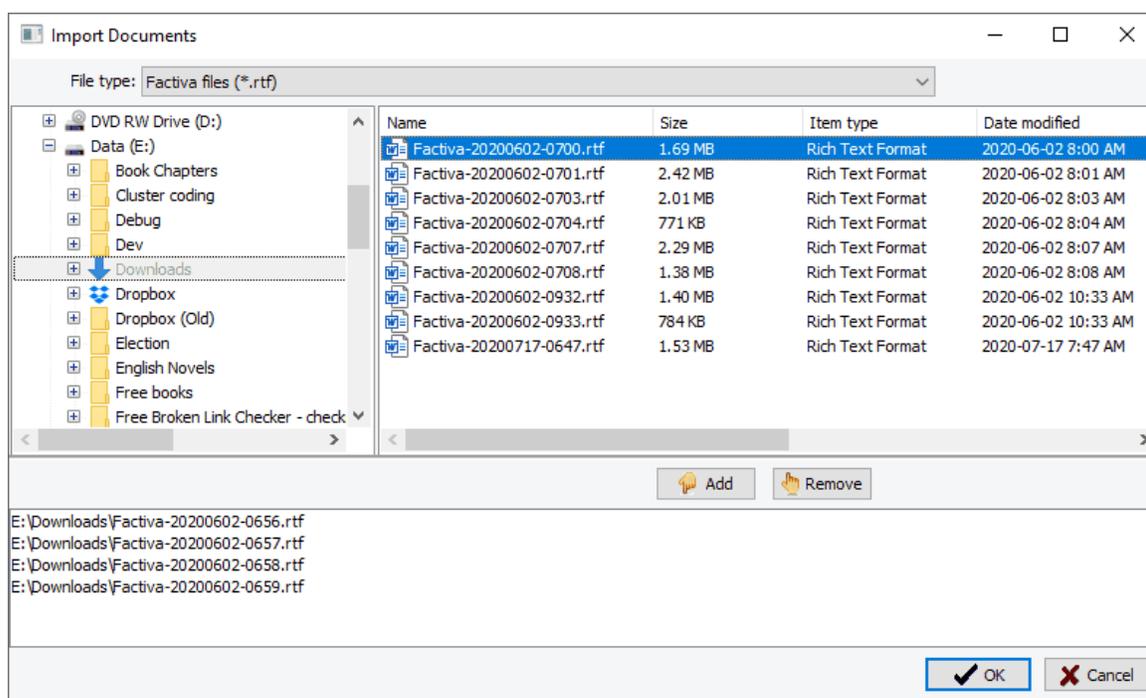


- Using the upper left section of the dialog box, select the location where Nexis UNI output files have been stored. All Rich Text Format and MS Word files in this folder will be listed in the window on the right.
- Click the file you would like to import. To select multiple files, hold down the **Ctrl** key while clicking on the other files or use the **Shift** key to select a range of files.
- Click the **Add** button to add the selected files to the list of files to import, located at the bottom of the dialog box. You may also drag the files from the top right section to this list.
- To remove a file from the list of files to import, select that file name and click the **Remove** button.
- Once all files have been added to the bottom list, click **OK**. A File Save dialog box will appear.
- Choose a name for your project and save it in the appropriate location. QDA Miner will close this dialog box, extract the transcripts and other relevant information from the specified files, save them into a new project and bring you to the main workspace.
- If needed, remove any variable that many not be needed using the **DELETE** command from the **VARIABLES** menu.

Factiva

Factiva is an online database that may be used for accessing current and archival news from more than 32,000 sources from all over the world. Content may come from newspapers, journals, magazines, television and radio transcripts, as well as newswires. When accessing Factiva one can search sources to retrieve those containing specific keywords within a specific time period, published in a specific geographic region, etc. Results can then be further narrowed by additional keywords, as well as other criteria.

After selecting relevant references, one can save up to a maximum of 100 selected documents into a single file by clicking the  button and selecting **Article Format**. The saved rich text format will contain multiple news transcripts. A single news transcript may look like this:

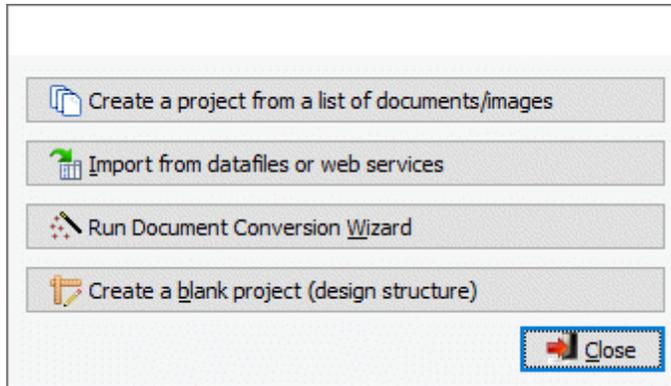


A Factiva news transcript typically has a header at the top including its source, the publication date, its author and other information followed by the original transcript. A single file may contain up to a hundred of those transcripts and an online session will often result in the creation of several of those files. Extracting relevant information from all those files can represent a real challenge if performed manually.

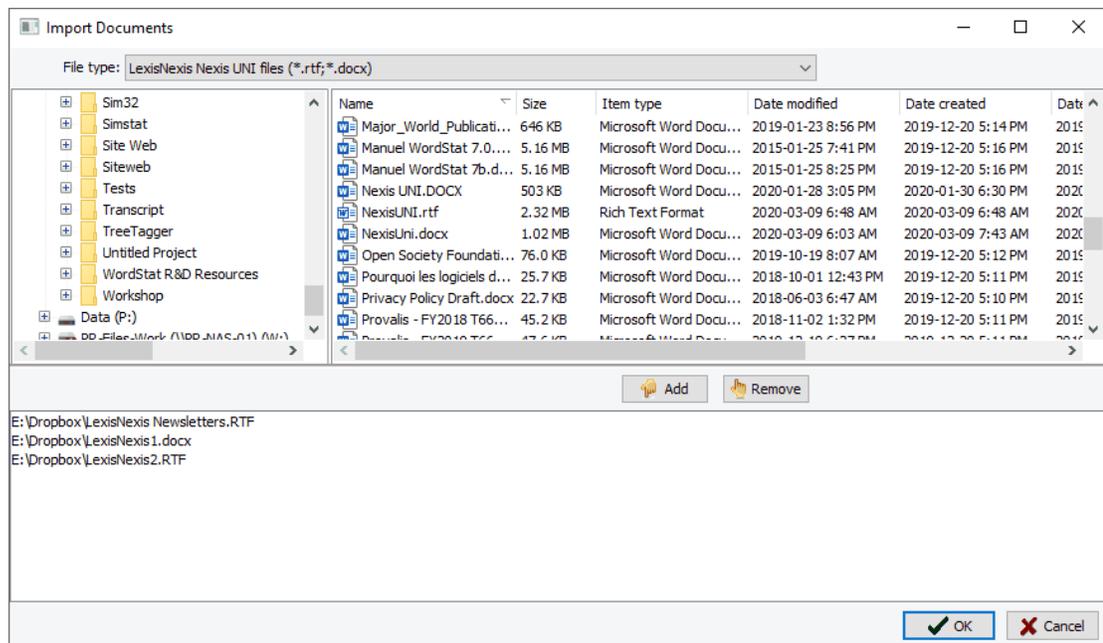
The QDA Miner Factiva importation routine greatly facilitates this process of information extraction. It can process multiple files, separate each entry and extract from those files the various fields storing each transcript in separate cases and associated information in as many variables as needed. Since QDA Miner process Rich Text Format as well as .DOCX file natively, it is recommended to save the results in either one of these two formats.

To import Nexis UNI files:

- Select the **PROJECT | NEW** command from the QDA Miner main menu, or **CREATE A NEW PROJECT** button from the intro screen. A dialog box similar to the one below box will appear:



- Click the **Import from datafiles or web services** button.
- Select **NEWS | FACTIVA** from the menu. A dialog box similar to this one will appear:



- Using the upper left section of the dialog box, select the location where Nexis UNI output file have been stored. All Rich Text Format files in this folder will be listed in the window on the right.
- Click the file you would like to import. To select multiple files, hold down the **Ctrl** key while clicking on the other files or use the **Shift** key to select a range of files.
- Click the **Add** button to add the selected files to the list of files to import, located at the bottom of the dialog box. You may also drag the files from the top right section to this list.
- To remove a file from the list of files to import, select that file name and click the **Remove** button.
- Once all files have been added to the bottom list, click **OK**. A File Save dialog box will appear.
- Choose a name for your project and save it in the appropriate location. QDA Miner will close this dialog box, extract transcripts and other relevant information from the specified files, save them into a new project and bring you to the main workspace.
- If needed, remove any variable that many not be needed using the **DELETE** command from the

VARIABLES menu.

NOTE: The extraction of information from Factiva relies on specific markers in the RTF files that may differ depending on the Factiva interface language. QDA Miner should be able to extract from transcripts created in the following languages (English, French, Spanish, German, Italian and Portuguese). If QDA Miner fails to extract information correctly, change the interface of Factiva to English before searching and saving results to files. If you encounter transcripts that can still not be imported properly, please send sample of those transcripts to support@provalisresearch.com.

NVivo to QDA Miner Conversion

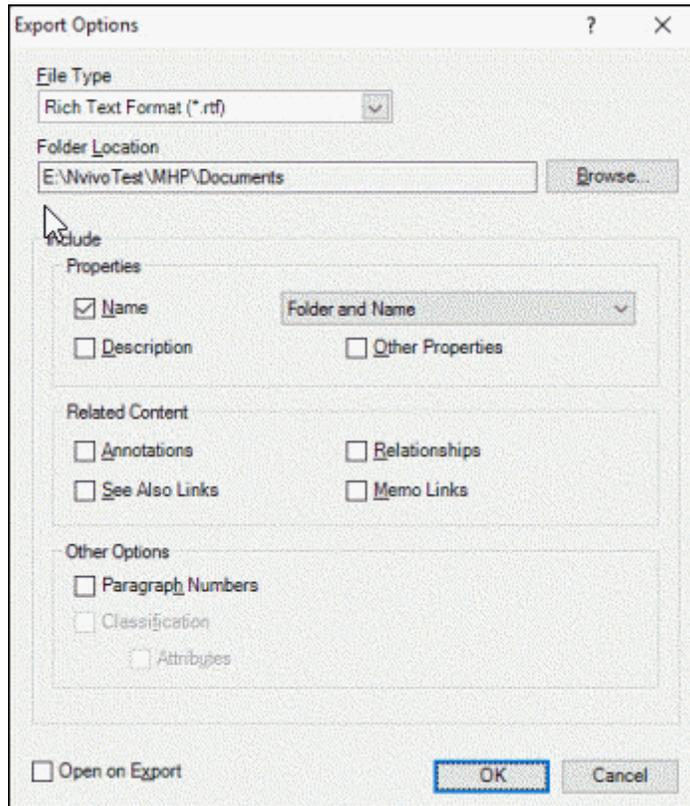
Qualitative analysis is very time consuming, and moving from one qualitative software to another is a huge endeavor if you have to start from scratch. Fortunately, QDA Miner has a NVivo to QDA Miner conversion wizard to guide you through the steps needed to convert your NVivo 7 to NVivo 12 projects into a QDA Miner project.

Exporting NVivo Data

Prior to creating a QDA Miner project with NVivo data you will need to follow the steps below to export documents and nodes from your NVivo project.

To export documents and nodes from NVivo 9, 10 or 11 projects: (see below for NVivo 7 and 8)

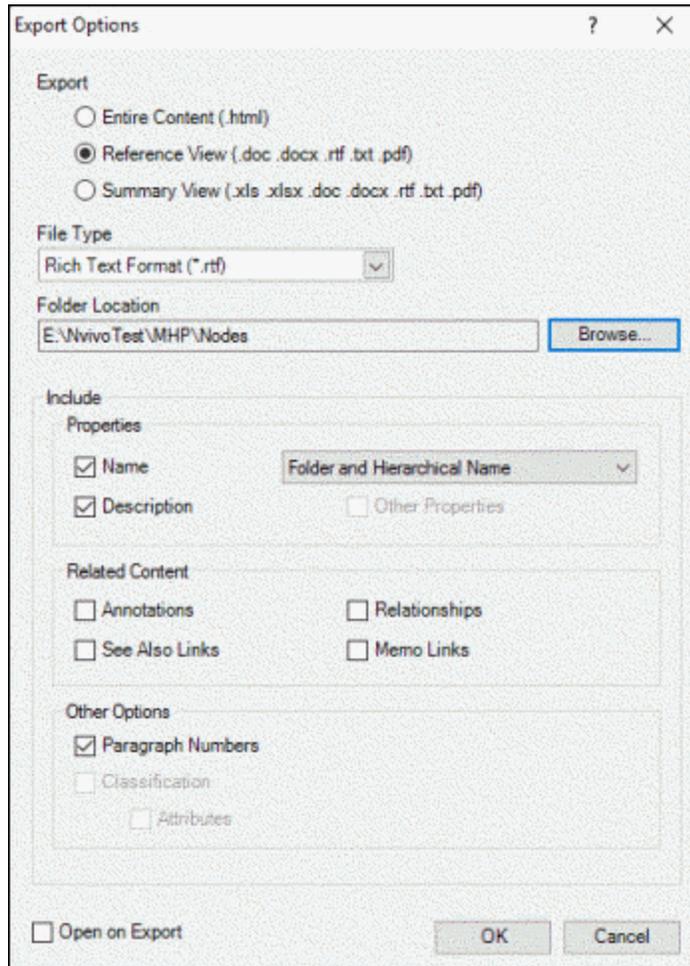
- Create two folders **Documents** and **Nodes** in the directory containing your NVivo project.
- Open the NVivo project you would like to import.
- Export all text documents and memos into the **Documents** folder using the following instructions:
 1. Go to the **Collections** section and move to the **All Sources** folder.
 2. In the **List View**, select all the internal documents and memos.
 3. From the **EXPORT** group of the **DATA** tab (version 11) or the **EXPORT DATA** tab (versions 9 and 10), select the **Items** button. You may also right-click in the list view and select the **EXPORT | EXPORT DOCUMENTS** command. A dialog box similar to this one should appear:



4. Set the **File Type** list box to **Rich Text Format (*.RTF)**; **MS Word (*.DOCX)** or **MS Word 97-2003 (*.doc)** format. The fastest and more accurate importation is achieved with the Rich Text format, followed by .DOCX and then the .DOC format.
5. Set the **Folder Location** to the **Documents** subfolder that has been created in the same directory as the original NVivo project.
6. In the **Include** section, enable the **Name** option and set the **Format** option to **Folder and Name**. All other options should be disabled. The dialog box should look like the one above.
7. Click **OK**.

Note: You may also export audio transcripts and video transcripts, using the same steps. To export pictures, you will need to export the pictures and the logs separately.

- Export all the nodes into the **Nodes** folder using the following instructions:
 1. Go to the **Collections** section and move to the **All Nodes** section.
 2. In the **List View**, select all the free nodes and tree nodes.
 3. From the **EXPORT** section in the **DATA** tab (version 11) or the **EXPORT DATA** tab (versions 9 and 10), select the **Items** command. You may also right-click anywhere in the **List View** section and select the **EXPORT | EXPORT NODES** command. A dialog box similar to this one will appear:



4. As shown above, set the **EXPORT** option to **Reference View**.
5. Set the **File Type** list box to **Rich Text Format (*.RTF)**, **MS Word (*.DOCX)** or **MS Word 97-2003 (*.doc)** format. The fastest and more accurate importation is achieved with the Rich Text format, followed by .DOCX and then the .DOC format.
6. Set the **Folder Location** to the **Nodes** subfolder that has been created in the same directory as the original NVivo project.
7. Enable the **Name** option and set the **Format** list box to **Folder and Hierarchical Name**.
8. Enable the **Description** and the **Paragraph Number** options. All of the other options should be disabled.
9. Click **OK**. (please note that exporting the node references may take a long time).

To export documents and nodes from NVivo 7 and 8 projects:

- Create two folders **Documents** and **Nodes** in the directory containing your NVivo project.
- Open the NVivo project you would like to import.
- Export all text documents and memos into the **Documents** folder using the following instructions:
 1. Go to the **Sources** section or for NVivo 7 or 8 to the **Collections** section and move to

the **All Sources** folder.

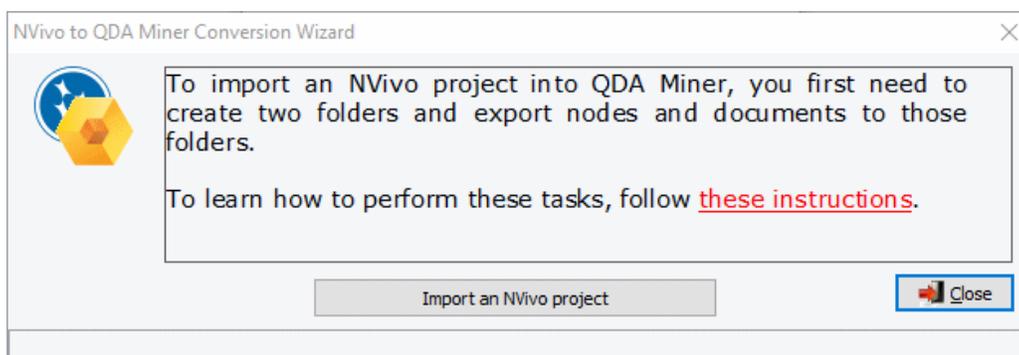
2. In the **List View**, select all the internal documents and memos.
3. From the **Project** menu, select the **Export Documents** command.
4. In the **Export Options** dialog box, enable the **Name** option and set the **Format** option to **Folder and Name**. All other options should be disabled.
5. Set the **File Type** list box to **Rich Text, MS Word 97-2003 (*.doc)** and click **OK**.
6. Select the **Documents** subfolder that has been created in the same directory as the original NVivo project and then click **OK**.

Note: You may also export audio transcripts and video transcripts, using the same steps. To export pictures, you will need to export the pictures and the logs separately.

- Export all the nodes into the **Nodes** folder using the following instructions:
 1. Go to the **Nodes** section and move to the **All Nodes** section.
 2. In the **List View**, select all the free nodes and tree nodes.
 3. From the **Project** menu, select the **Export Nodes** command.
 4. If you are running NVivo 7 or 8, in the **Export Options** dialog box, set the **Export** list box to **Reference View**.
 5. Enable the **Name** option and set the **Format** list box to **Folder and Hierarchical Name**.
 6. Enable the **Description** and the **Paragraph Number** options. All of the other options should be disabled.
 7. Set the **File Type** list box to **MS Word 97-2003 (*.doc)** and click **OK**.
 8. Select the **Nodes** subfolder that has been created in the same directory as the original NVivo project and then click **OK**.

Creating a New Project Using NVivo Data

- Once you have exported documents and nodes from your NVivo project, select **QUALITATIVE SOFTWARE | NVIVO** from the menu. The NVivo to QDA Miner Conversion Wizard opens.



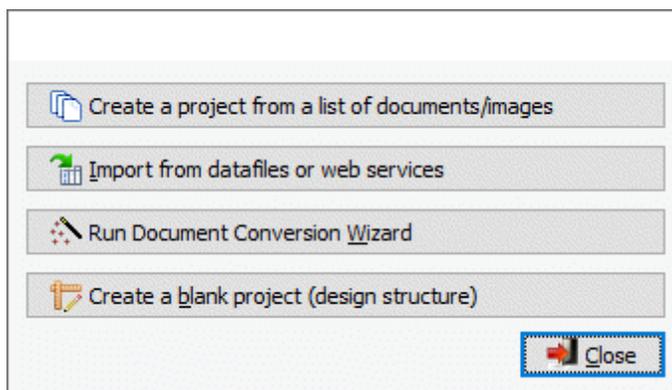
- Click **Import an NVivo** project. An **Open** dialog box appears. Your directory must contain your original NVivo project and the **Documents** and **Nodes** files that you created according to the steps above.
- Select the NVivo project that you would like to import.
- Click **Open**.
- Choose a name for your project and save it in the appropriate location. The data will be imported and you will be taken to QDA Miner's main workspace to start analyzing your data.

Using the Document Conversion Wizard

The Document Conversion Wizard is a utility program used to import one or more documents into a new project file. This tool supports the importation of numerous file formats including plain ASCII, Rich Text Format, MS Word, HTML, Acrobat PDF files, and WordPerfect documents. It may be instructed to split large files into several cases and to extract numeric and alphanumeric data from these files. The Document Conversion Wizard may be run either as a stand-alone application or from within QDA Miner. When no splitting, transformation or extraction of information from documents are necessary, you can also use the easier to use [Create a Project from a List of Documents](#) importation method.

To run the Document Conversation Wizard from QDA Miner:

- Select the **NEW** command from the **PROJECT** menu. A dialog box similar to the one below will appear.



- Click the **Run Document Conversion Wizard** button. The program then guides you through the necessary steps to import the documents and extract relevant data.

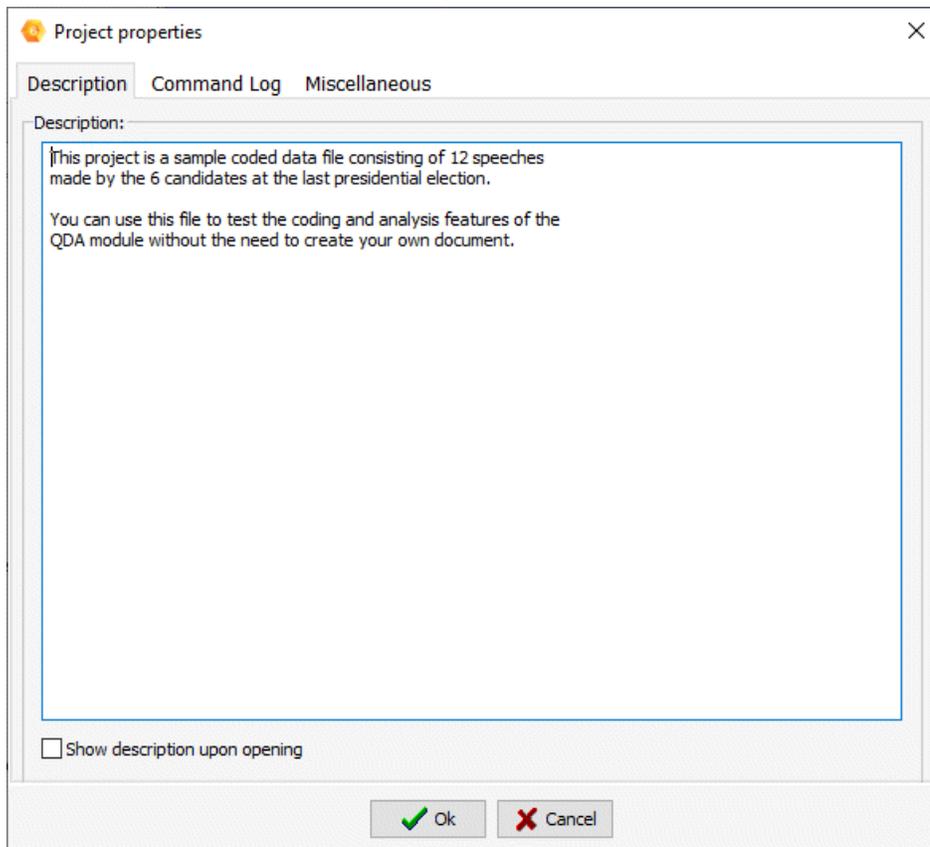
For more detailed information on the document importing process using this utility program, consult the Document Conversion Wizard help file.

Project Properties

The project properties function allows you to create a description of your project that may be displayed automatically when opening the project file, set the operations to be recorded in the Command Log and set other miscellaneous properties such as an automatic backup reminder, a user support email, the levels of a codebook and custom menu parameters.

To access the project properties function:

- Select the **PROPERTIES** command from the **PROJECT** menu. This command calls up a dialog box similar to the one below.



The **Project properties** dialog box contains three tabs: Description, Command Log and Miscellaneous.

To save or edit a project description:

- Select the **Description** tab.
- Enter or edit a project description.
- If you wish to display this description automatically when the project file is opened, select the **Show description upon opening** checkbox.
- Click the **OK** button to save the changes you made. If you choose to quit this dialog box without saving the changes, click the **Cancel** button.

To configure your command log:

- Select the **Command Log** tab.
- Checked off the operations you would like the Command Log to record.
- Click the **OK** button.

See the [Command Log](#) section for more information regarding the Command Log.

To set an automatic reminder to backup your project:

- Select the **Miscellaneous** tab.
- Choose the interval of time for which the reminder will be set to go off.
- Type the extension of the location where the backup will be saved in the **Default folder** field or click the  button and select the location from the **Backup location** dialog box.
- Click the **OK** button.

To set the user support email:

- Select the **Miscellaneous** tab.
- By default the user support email is set to support@provalisresearch.com. If you would like to change this, tick the **Customize email contact** checkbox.
- Enter an email address.
- Enter a menu caption.
- Click the **OK** button.

To set the maximum levels in the codebook:

- Select the **Miscellaneous** tab.
- To increase or decrease the maximum number of levels allowed in a project use the **Up** and **Down** arrows until the desired level is reached. QDA Miner allows you to define the number of levels the codebook can contain between 2 and 8.
- Click the **OK** button.

To set the custom menu:

- Select the **Miscellaneous** tab.
- Click the **Edit** button.
- Select the menu items and features you would like to hide from the list box.

- Click **OK**.

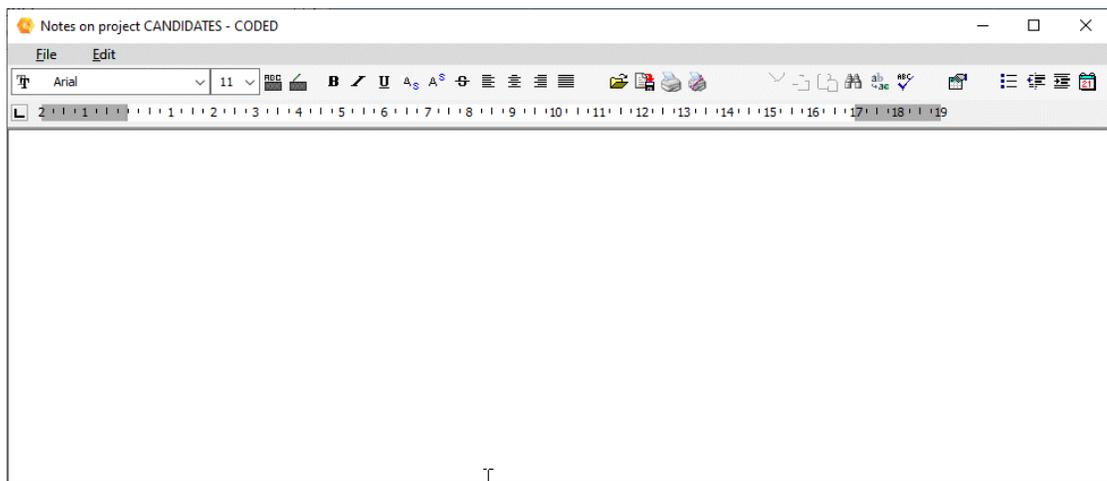
For more information on menu levels see [Working with Menu Levels](#).

Project Notes

QDA Miner allows you to write general notes to yourself or to be shared with other people working on this project. Notes may be used as reminders of decisions you made, things to be done, etc.

To enter or edit general notes:

- Select the **NOTES** command from the **FILE** menu, or press the **F3** key from anywhere in the program. This will open a **Notes** editor like the one below.



- Enter your comments or observations. You can format text and paragraphs, change font attributes, insert graphics and tables. You may also save your notes to disk in RTF format.
- Notes are automatically saved when the editor is closed. To close the editor click on the **X** at the top right or select **CLOSE** from the **FILE** menu on the editor's menu bar.

Working with Menu Levels

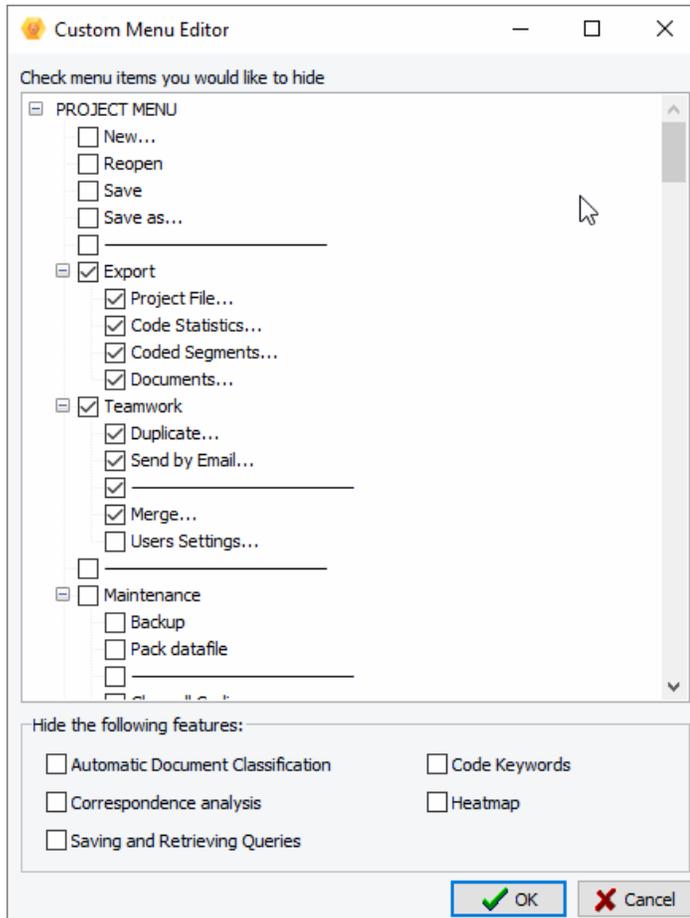
QDA Miner offers not only basic coding and retrieval functions but also advanced analytical tools that may be intimidating for novice users or unnecessary for users only involved in the coding of documents and not in the data management or data analysis of a research project. The custom menu editor may be used to simplify the interface by reducing the number of visible menu items, making the software easier to learn and use. QDA Miner currently offers three menu levels: **Full** showing the full set of commands and features including the analysis and data management features, **Basic** that presents only the most commonly used commands for applying codes to documents, and **Custom** that can be adjusted to display any chosen set of menu items suitable for a specific purpose.

By default, when a menu level is chosen it will be used across projects and across sessions until the user explicitly changes the menu level to a different setting. A project administrator can also associate different default menu levels to specific users, preventing them from accessing some commands and hiding unnecessary features. For more information on how to assign menu levels to users, see [Setting Security & Multi-users Settings](#).

To edit the custom menu:

The definition of custom menu is specific to projects, so you could create different menus for different projects.

- Select the **PROPERTIES** command from the **PROJECT** menu.
- Move to the **Miscellaneous** page and click the **Edit** button on the right of the **Custom Menu** option. A dialog box similar to this one will appear:



- The top list box displays items from the pull-down menu that may be hidden from the user. Other advanced features are also listed in a box below this list. To hide an item, simply click beside it to insert a check mark.
- Once finished, click the **OK** button to confirm the changes. To close this dialog box without saving any changes, click the **Cancel** button.

Setting Security & Multi-User Settings

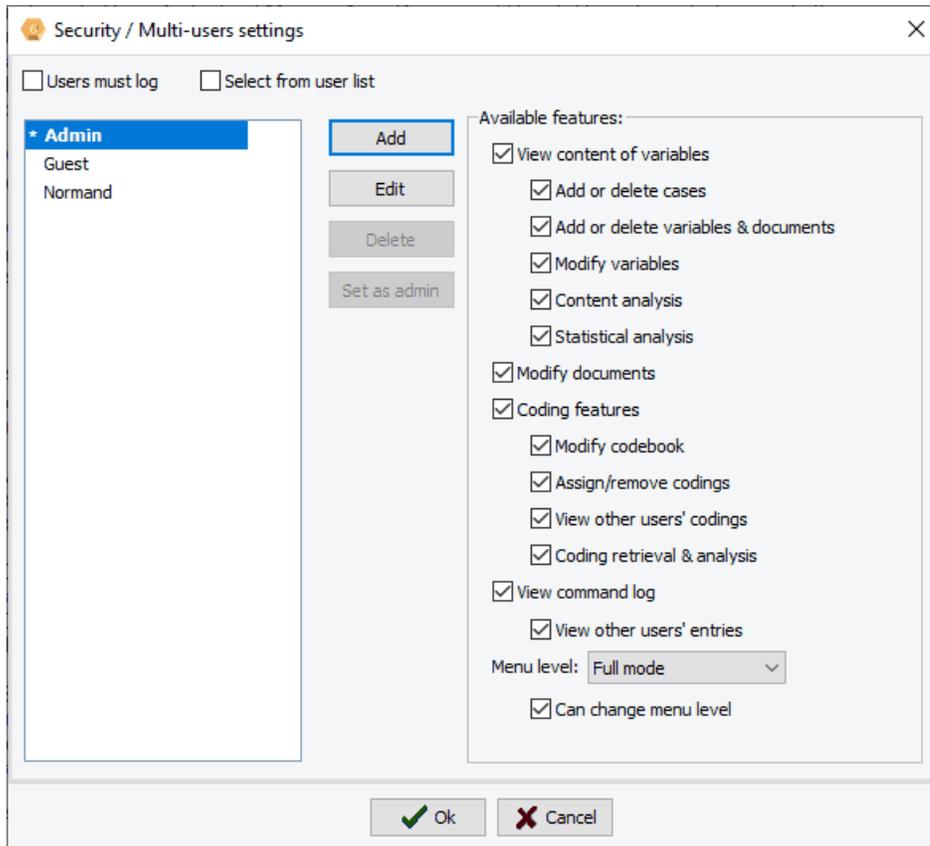
It is possible to limit the number of people who can access and edit a project or limit the type of operations that can be performed by certain individuals by creating user accounts and requiring people to provide a user name and password to access a project. This feature is useful for preventing the deletion of existing cases or variables, or edition of documents or values stored in other variables. The multi-user account feature is also useful for assessing the reliability of coding by allowing the same documents to be coded by different users (see [Assessing Inter-Coders Agreement](#)).

When setting up a project to support multiple users, one of these users must be able to control access

to the project, create and delete user accounts and define passwords. This user is commonly known as the **administrator**. When creating a new project, an administrator account is automatically created. Both the default user name and password for this account is **ADMIN**. If you choose to restrict access to some users, it is highly recommended that you change this user name and password to prevent unauthorized changes to user access rights.

To change the multi-user settings of a project:

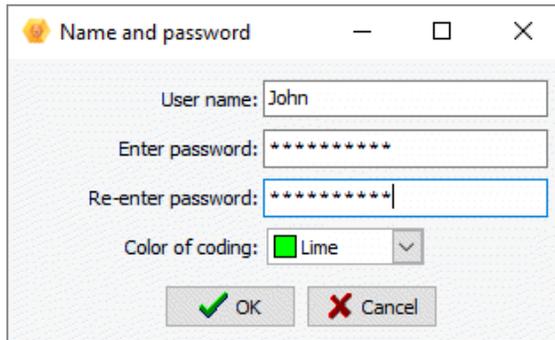
- Select the **TEAMWORK | USER SETTINGS** command from the **PROJECT** menu. The following dialog box will appear:



By default, opening a project without using the user log screen gives the user all administrator access rights. Enabling the **Users must log** option will display a **Name and password** dialog box prompting the user to enter a valid user name and password in order to access the project file. The user name can be either entered in a text box or selected from a drop-down list box. To display existing user names in a list box, set the **Select from user list** option.

To add a new user account:

- Click the **Add** button. The following dialog box will appear:



- Enter the **User name**.
- In the **Enter password** edit box, enter this user's password.
- Enter the password a second time in the next edit box to make sure it was entered correctly.
- QDA Miner can emphasize coding assigned by different coders using a distinct color for each coder for displaying their code marks. The **Color of coding** option can be used to select the color used to display codes assigned by this coder (For further instruction, see [Modifying code marks color scheme](#))
- Click **OK** to save the new user account. Once a user's account has been created, you have to specify which specific features this user will be able to access.

To define the user access rights:

- Select the user for which you want to define or edit access rights.
- In the list of available features to the right of the dialog box, select the features you want this user to have access to and clear the features that you do not want them to access.

When creating several user accounts to establish inter-coder agreement, it is strongly recommended that you deactivate the **View other users' coding** option. This prevents a user from seeing code marks assigned to text segments by other users. Disabling this feature also restricts any coding retrieval procedures to the coding created by other users and prevents access to the inter-coder agreement dialog box.

To prevent users from modifying existing documents or values stored in variables, clear the box beside the **Modify variables** and **Modify documents** options. It may also be a good idea to disable the **Add or delete cases** and **Add or delete variables/documents** options. Lastly, if you want to prevent users from adding new codes to the codebook, or deleting or modifying existing ones, make sure the **Modify codebook** option is disabled.

- Adjust the **Menu level** option to define a default menu level for this user. To prevent this user from changing to another menu level, remove the check mark beside the **Can change menu level** option.
- Click **OK**.

To delete a user account:

- In the list of existing accounts to the left of the dialog box, select the account you want to delete.
- Click the **Delete** button.

- To save the changes you made to the accounts and close this dialog box, click the **OK** button. To close this dialog box without saving any changes, click the **Cancel** button.

Adding New Variables

The **ADD** command in the **VARIABLES** menu is used to add new variables to the project file. This command displays a dialog box similar to the one used to create variables for a new data file (for more information on this dialog box and its options see [Creating a New Project](#)).

- Specify the name of the new variables and set the variable types, sizes and descriptions.
- Click the **OK** button to create these new variables and add them to the end of the current data set.

To append variables stored in another project files, see [Merging Projects](#).

Append Variables from an External Data File

This command allows you to append new variables and values stored in an external data file to each case in the current project. The supported file formats for this external file are:

- QDA Miner projects (*.ppj)
- Simstat data files (*.dbf)
- MS Excel spreadsheets (*.xls; *.xlsx)
- MS Access data files (*.mdb)
- Tab delimited files (*.tab)
- Comma separated value files (*.csv)

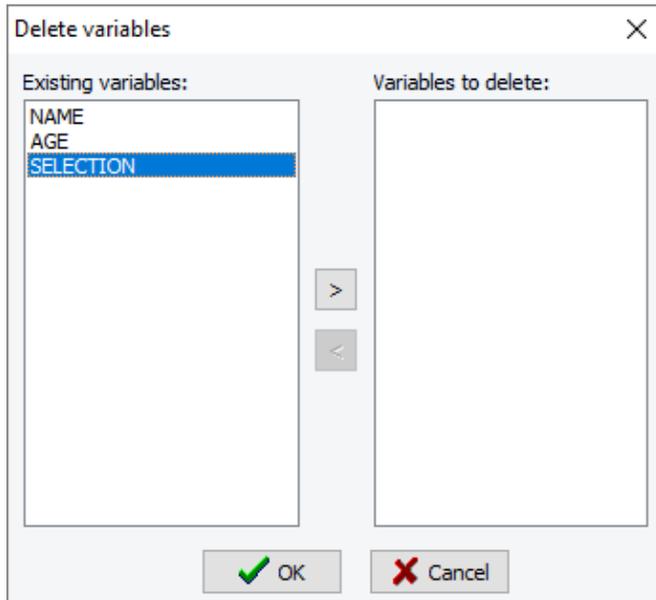
The importation of the variables is performed by matching cases using one or several key variables shared by the project file and the external data file. If no case of the external data file matches the key values of a case in the current project, missing values are assigned to the newly created variables. If several cases in the secondary file match the key values, values are extracted from the first matching case.

Variables with identical names may only be used to match cases, and their data cannot be imported into the current project. To replace the values of one of those variables with the ones in the external data file, simply delete this variable from the current project prior to this operation.

Deleting Existing Variables

To delete one or more variables:

- Select the **DELETE** command from the **VARIABLES** menu. The following dialog box will appear.



- Highlight the names of the variables that you want to delete and click the  button to move them to the **Variables to delete** list box.
- To delete successive variables, click the first variable, drag the mouse cursor down the list to highlight multiple variables, and then click the  button.
- To remove a variable from the list of variables to delete select the name of this variable in the **Variables to delete** list box and click  the button.
- Click the **OK** button to delete all selected variables.

Transformation

Enter topic text here.

Changing Variable Types

Some operations require specific variable types. For example, qualitative coding cannot be applied to nominal or string variables, only on documents or graphic variables. Also, a comparison of coding among subgroups of cases using the [Coding by Variable](#) command can only be made if the comparison variable is numeric or categorical. Another situation where a change in data type may be required is when you need to add decimal values to a numeric variable created as an integer. You first need to transform this integer variable into a floating-point numeric data type to do so.

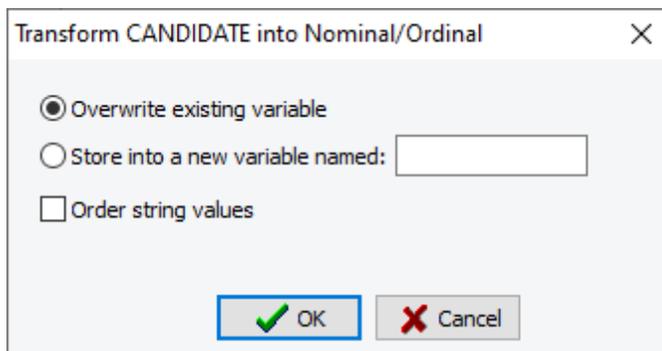
QDA Miner offers the ability to change the type of an existing variable or to create a new variable containing the values of the existing variable but storing the values using a different data type. The following transformations are currently supported:

- Float -> Integer
- Float -> String
- Integer -> Float
- Integer -> String
- Integer -> Nominal

- Nominal -> String
- Nominal -> Date
- Nominal -> DateTime
- String -> Nominal
- String -> Document (codable)
- String -> Date
- String -> DateTime
- String -> Integer
- String -> Float
- Document -> String
- Date -> String
- DateTime -> String

To change the type of a specific variable:

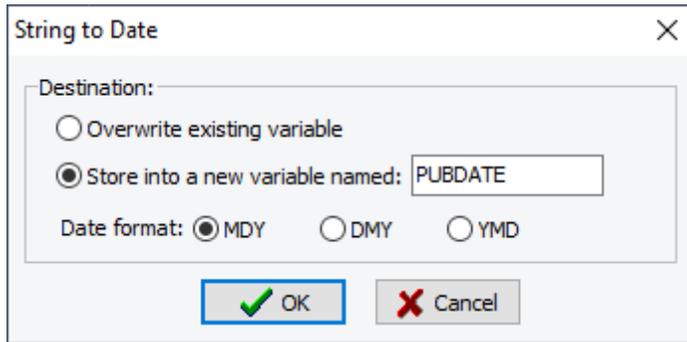
- Select the variable you want to transform by clicking on it in the **VARIABLES** window.
- Select the **TRANSFORM** command from the **VARIABLES** menu. The allowed transformations will be listed in a submenu.
- Choose the desired data-type transformation. A dialog box similar to the one shown below will appear.



- To change the type of the selected variable, choose **Overwrite existing variable** and click the **OK** button.
- To copy the values of the selected variable into a variable of the new data type, choose **Store into a new variable named**, type the name of the new variable in the edit box and click the **OK** button. If the new variable name already exists, you will be prompted to confirm the overwriting of this variable.

Transforming Strings Into Dates

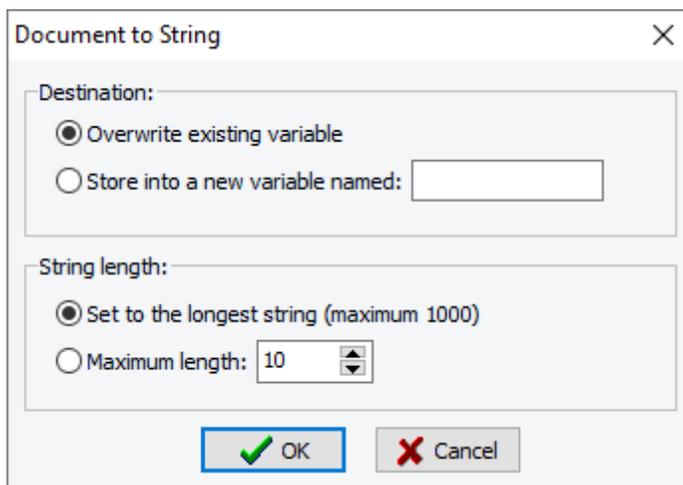
QDA Miner can extract date information from a string and store the date into a new variable. It can recognize in a string various date formats such as 01/05/2011, January 5th, 2011, 5 JAN 2011, or 2011-01-05 and will ignore surrounding text. When this transformation is performed, a dialog box similar to the one shown below will appear:



- To change the selected string variable into a date, choose **Overwrite existing variable**. To store the date values that are extracted from the selected variable into a new date variable, choose **Store into a new variable named** and type the name of the new variable in the edit box and then click the **OK** button. If the new variable name already exists, you will be prompted to confirm the overwriting of this variable.
- The **Date format** option allows you to choose the specific sequence that is used for displaying dates. QDA Miner will recognize only one date sequence format at a time, either month/day/ year (MDY), day/month/year (DMY) or year/month/day (YMD). Select the sequence used in the most common date format. If no date with a specific format is found for a case, the date variable will remain empty.

Transforming Documents Into Strings

QDA Miner can transform a document variable into a string with a maximum length of 256 characters. Several situations may justify such a transformation. While documents can be coded, you cannot filter cases based on the content of document variables. Also, case descriptors cannot include text stored in documents, while string variables may be used as part of the case descriptors. When importing several data files, long strings may be imported as document variables even if there was no intention of coding them. When this transformation is requested, a dialog box similar to the one shown below will appear:



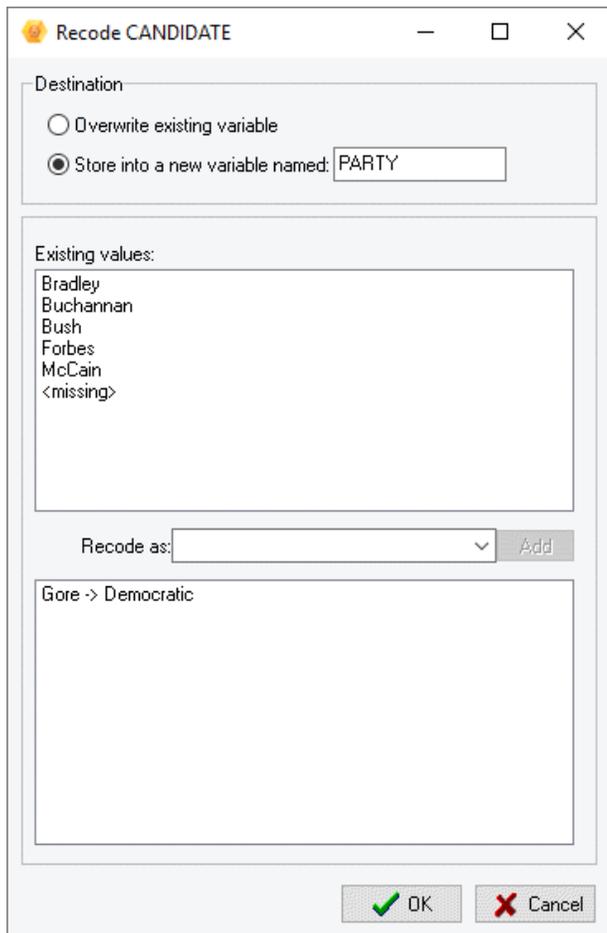
- To change the selected document variable into a string type, choose **Overwrite existing variable**. To store the date values that are extracted from the selected variable into a new date variable, choose **Store into a new variable named** and type the name of the new variable in the edit box. If the new variable name already exists, you will be prompted to confirm the overwriting of this variable.
- QDA Miner set the size of the new string variable automatically by selecting the **Set to the longest string** option. QDA Miner will go through all cases and set the size to the longest string

encountered. If a document is longer than 255 characters, the variable size will be set to 255 and the document will be truncated to this length. You can also set the size to a fixed length by setting the **Maximum length** option to the desired length. All documents longer than the set length will be truncated to this length.

Recoding Values of a Variable

The **RECODE** command provides an easy way to apply multiple changes to the values of numeric, categorical or string variables or to create new variables based on a new grouping of the values of an existing variable.

- To access this command, select the **TRANSFORM | RECODE** command from the **VARIABLES** menu. A recoding dialog box will appear with the following regions.



The screenshot shows a dialog box titled "Recode CANDIDATE". It has a "Destination" section with two radio buttons: "Overwrite existing variable" (unselected) and "Store into a new variable named:" (selected). The text "PARTY" is entered in the adjacent text box. Below this is an "Existing values:" list box containing "Bradley", "Buchanan", "Bush", "Forbes", "McCain", and "<missing>". A "Recode as:" dropdown menu is empty, with an "Add" button to its right. Below the dropdown is a list box containing "Gore -> Democratic". At the bottom are "OK" and "Cancel" buttons.

- At the top of the dialog box the **Destination** section allows you to specify where the computation results will be stored. To transform the values of the selected variable, choose the **Overwrite existing variable** option. To keep the selected variable intact and store the result in another variable, select the **Store in a new variable named** option and type in the name of the new target variable in the edit box. If you enter the name of an existing variable, the program will ask you if you want to replace its values with those produced by the change. If the variable does not exist, the program will ask you to confirm the creation of the new variable.
- The **Existing values** list box displays the list of all values found in the selected variable. Select one or several items from this list and recode by either typing a new value in the **Recode as** edit box or selecting another existing value from its drop-down list. To confirm the recoding, click the **Add** button. The value transformations to be performed will be listed in the recoding list box. Repeat this operation until all desired transformations have been specified. Untransformed values remaining in the **Existing values** list box will remain unchanged or will be copied to the destination variable if you selected to store values in another variable. QDA Miner can automatically detect when a nominal variable is needed and perform the variable type transformation and recoding in a single operation. An example of when this may be useful is when you recode ages to age ranges.

The special keyword **<missing>** is used to replace specific values with an empty cell and further treat those values as missing. Cases with missing values are ignored when performing some analyses involving those variables, such as the [Coding by Variables](#) command.

To remove a transformation from the list of recoding, select it and press the **<Delete>** keyboard key.

- Once a valid destination and a recoding list have been entered, perform the recoding by clicking the **OK** button.

Binning Numerical Variables

The **Binning** function allows you to "bin" or group variables into different categories. This function transforms a numeric or floating point variable to a nominal variable that consists of a range of numbers. For example, if you have a numeric variable with values ranging from 1 to 100, and you want to transform this variable into only 5 different classes, you can use this function to create 5 bins: 1 to 20, 21 to 40, 41 to 60, 61 to 80 and 81 to 100

To perform binning on a numerical variable:

- On the **Data** tab move to the **Structure** tab
- Select a numeric or floating point variable
- Select the **Transform** button.
- Scroll down to **BINNING** in the adjacent menu. A dialog box like the one below opens.

| Label | Upper boundary | Frequency |
|--------------|----------------|-----------|
| 1900 - 1925 | 1925 | 2793 |
| >1925 - 1950 | 1950 | 7010 |
| >1950 - 1975 | 1975 | 5422 |
| >1975 - 2000 | 2000 | 6071 |
| >2000 - 2025 | 2025 | 3709 |

At the top of the dialog box the **Destination** section allows you to specify where the computation results will be stored. To transform the values of the selected variable, choose the **Overwrite existing variable** option. To keep the selected variable intact and store the result in another variable, select the **Store in a new variable named** option and type in the name of the new target variable in the edit box. If you enter the name of an existing variable, the program will ask you if you want to replace its values with those produced by the change. If the variable does not exist, the program will ask you to confirm the creation of the new variable.

The **Binning** section allows you to choose the **Number of bins** and the binning **Method**. You have two methods available:.

1. **Equal Intervals** means the length of the interval for each bin will be the same. In the example above, we have an interval of 20 for each bin. With this option you can set the **Start** and **Increment**. These values are automatically generated but you have the choice to change them by typing the chosen value in the field.
 2. The **Equal Frequencies** option automatically calculates the intervals of each bin and attempts to produce bins with a similar number of cases. The **Boundaries** option determines if the upper boundary is included in the bin or not.
- Decide if you want to **Overwrite the existing variable** or **Store in a new variable**. If you chose the latter option, type the name of your new variable.
 - The **table** displays the currently set bins.
 - Choose the number of bins.
 - Set your **Method** and your **Boundaries**.
 - Select the **Generate** button.
 - Click **OK** to perform the transformation

Performing Complex Numeric Transformation

The **Compute Number** command allows transformations using various functions on one or more variables. WordStat offers more than 50 operations and functions including numerical operators, trigonometric transformations (cos, sin, log, etc.), statistical functions (mean, minimum, maximum across variables or cases, etc.), date and random number operations. Conditional transformation can also be performed using an IF-THEN-ELSE logical structure. When this command is selected, a dialog box similar to this one is displayed.

Numeric transformation - Return a pseudo-random number with a mean of 0 and standard deviation o... X

Numeric

ID
GENDER
AGEGROUP
SUBSCRIBE
NPS
AGE

(...)
=

1 2 3 /
4 5 6 *
7 8 9 -
0 . +

AND
OR
NOT

ABS (numeric)
ACOS (numeric)
ASIN (numeric)
COS (numeric)
COUNT (varlist)
CSC (numeric)
DAY (date)
EXP (numeric)
FACT (numeric)
LAG (variable)
LN (numeric)
LOG (numeric)
MAX (varlist)
MEAN (varlist)
MIN (varlist)
MISSING
MOD10 (numeric)
MONTH (date)
NORMAL (numeric)

Transformation

Store in: FUTURSPEND Conditional transformation Integer Floating point

If: (NPS > 8) AND (YEAR(SUBSCRIBE) > 2018)

Then: SUM(PSENDING1...SPENDING21)+SPENDING25

Else: COUNT(SENDING...SPENDING24)

OK Cancel Help

Store In- This option allows you to specify the target variable where the computation results will be stored. If the target variable already exists, WordStat asks you whether you want to replace its values with those produced by the transformation. If the variable does not exist, it is appended at the right end of the data file. The new numerical variable can be either an **Integer** or a **floating point**

numerical variable. If the computed numerical values contains decimals and is stored into an integer data type, the value is rounded to the nearest integer. The TRUNC function (see below) may however be used to store only the integer part of the computed numerical value.

Conditional transformation - This option allows you to select whether the same transformation will be performed on all active records or whether different transformations should be performed on specific records according to a logical condition.

Formula - When the **Conditional Transformation** option is deactivated, this edit box is used to store the transformation expression that will be applied to all active records.

If - When a conditional transformation is requested, this option contains a logical expression up to 250 characters long specifying criteria for cases on which to apply a specific transformation. This expression must be evaluated as true or false. It can be a simple logical expression including the following 3 components: a variable name, a relational operator, and a variable name or a numeric constant. It can also be a complex expression composed of many simple expressions related with logical operators (AND, OR, XOR). Parentheses can be used to specify the order in which expressions are evaluated. In the following example, the last two conditions are assessed before the first one.

```
(GROUP = 1) OR ((GROUP = 2) AND (AGE > 30))
```

For a list of all available functions and operations available for logical expressions see [xBase functions](#).

Then / Else - If the expression is true the transformation expression in the **THEN** field is computed, if not, the expression in the **ELSE** field is used.

Expression Operators and Rules

ARITHMETIC OPERATOR

| | |
|---|----------------|
| + | Addition |
| - | Subtraction |
| * | Multiplication |
| / | Division |
| ^ | Exponentiation |

CONSTANT

| | |
|----|-----------------------|
| PI | 3.1415926535897932385 |
|----|-----------------------|

MISSING VALUE FUNCTIONS

| | |
|---------|-------------------------|
| SYSMIS | Blank cells |
| MISSING | Variable missing values |

NUMERIC AND TRIGONOMETRIC FUNCTIONS

Syntax FUNCTION (value, variable or expression)

| | |
|------|------------|
| ABS | Absolute |
| ACOS | ArcCosine |
| ASIN | ArcSine |
| ATAN | Arctangent |
| CSC | Cosecant |

| | |
|-------|-------------------|
| COS | Cosine |
| EXP | Exponential |
| FACT | Factorial |
| LN | Natural logarithm |
| LOG | Base-10 logarithm |
| MOD10 | Modulus |
| RND | Round |
| SEC | Secant |
| SQRT | Square root |
| SQR | Square |
| SIN | Sine |
| TAN | Tangent |
| TRUNC | Truncate |

STATISTICAL FUNCTIONS (ACROSS VARIABLES)

Syntax FUNCTION (Var [Var Var..Var])

| | |
|-------|--------------------------------|
| MEAN | Mean |
| COUNT | Count (missing value excluded) |
| SUM | Sum |
| STDEV | Standard deviation |
| VAR | Variance |
| MIN | Minimum |
| MAX | Maximum |

STATISTICAL FUNCTIONS (ACROSS CASES)

Syntax FUNCTION (Variable)

| | |
|--------|--------------------|
| VMEAN | Mean |
| VCOUNT | Count |
| VSUM | Sum |
| VSTDEV | Standard deviation |
| VVAR | Variance |
| VMIN | Minimum |
| VMAX | Maximum |
| ZSCORE | Normalized score |
| LAG | Lag |

RANDOM NUMBER FUNCTIONS

Syntax FUNCTION (value, variable or expression)

| | |
|---------|--|
| NORMAL | Normal pseudo-random number with mean of 0 and standard deviation of X |
| UNIFORM | Uniform pseudo-random number between 0 and X |

DATE FUNCTIONS

| | |
|--------|--|
| YRMODA | (yy,mm,dd) convert 3 values, variables or expressions into a julian date |
| YEAR | (julian date) return the year of a julian date |
| MONTH | (julian date) return the month of a julian date |
| DAY | (julian date) return the day of a julian date |
| TODAY | return current julian date |

xBase functions

ALIAS()

Returns the Alias name of the current workarea as a string.

ALLTRIM(String)

Trims both leading and trailing spaces from a string. The string may be derived from any valid xBase expression.

```
ALLTRIM(" Provalis ") returns 'Provalis'.
```

AT(SearchString, TargetString)

Determine whether a search string is contained within a target. If found, the function returns the position of the search string within the target string (relative to 1). If not found, the function returns 0 (zero).

```
AT("gh", "defghij") returns 4.
```

CHR(Val)

Converts a decimal value to its ASCII equivalent.

```
CHR(83) returns 'S'
```

CTOD(String)

Converts a character string into an xBase date. The string must be formatted according to the Windows date format settings.

```
CTOD("12/31/94")
```

DATE()

Returns the system date (today). Use `DTOC(DATE())` to retrieve today's date formatted according to the Windows settings.

DAY(Date)

Returns the day portion of an xBase date as an integer.

DELETED()

Returns True if the record is deleted and False if not deleted.

DESCEND(String)

An xBase function that inverts a key value using 2's complement arithmetic. The result of the operation is the arithmetic inverse of the key value. When inverted keys are sorted in ascending sequence, the result is in descending order. A filter expression could be

```
DESCEND(DTOS(billdate)) + CUSTNO
```

DTOC(Date)

Converts an xBase date into a character string formatted according to the Windows settings. For example, if the date format was American and the date field contained March 21, 1995, `DTOC(datefield)` would return '03/21/1995'.

DTOS(Date)

Converts an xBase date into a string formatted according to standard xBase storage conventions (CCYYMMDD). For example, December 21, 1993 would be returned as '19931221'. Indexes that contain date elements should use the `DTOS()` function, which naturally collates

into oldest date first.

EMPTY(Field)

Reports the empty status of any xBase field. Character and date fields are empty if they consist entirely of spaces. Numeric fields are empty if they evaluate to zero. Logical fields are empty if they evaluate to False.

Memo fields that contain no reference to a memo block in the associated memo file are empty.

IF(Logical, True Result, False Result)

This is the immediate if function. If the Logical expression is true, return the True result, otherwise return the False result. The types of the True Result and the False Result must be the same (i.e., both numeric, or both strings, etc.) The logical expression must of course evaluate as True or False.

```
IF( DATE() - CTOD( "12/31/93" ) > 0, "This Year", "Last Year" )
```

IIF(Logical, True Result, False Result)

Supported exactly like IF() as noted above.

INDEXKEY()

Returns the current index key as a string. (Same as ORDKEY().)

LEFT(String, Length)

Returns the leftmost characters of the expression for the defined length.

```
LEFT( "xyzabc", 3 ) returns 'xyz'.
```

LEN(Expression)

Returns the length of the expression result as an integer.

LOWER(String)

Converts the string expression into lower case.

MONTH(Date)

Returns the month portion of an xBase date as an integer.

ORDER()

Returns the current index order as an integer.

ORDKEY()

Returns the current index key as a string. (Same as INDEXKEY().)

PADC(String, Length, Character)

Centers the passed string between a number of the passed character to make the string the specified length.

```
'[ ' + PADC( "Scott", 9, "-" ) + ']' returns '[--Scott--]'.
```

PADL(String, Length, Character)

Pads the passed string to the specified length with the specified characters. If the string is longer than the value specified by Length, the string is truncated to this length.

```
'[ ' + PADL( "Scott", 8, "*" ) + ']' returns '[***Scott]'.
```

```
'[ ' + PADL( "Loren Scott", 8, " " ) + ']' returns '[Loren Sc]'.
```

PADR(String, Length, Character)

Pads the passed string to the specified length using the specified character. If the string is longer than the value specified by Length, the string is truncated to this length.

```
'[' + PADR("Scott", 8, " ") + ']' returns '[Scott ]'.  
 '[' + PADR("Loren Scott", 8, " ") + ']' returns '[Loren Sc]'.
```

RAT(SearchString, TargetString)

Determine whether a search string is contained within a target, starting from the right side of the target string. If found, the function returns the position of the search string within the target string (relative to 1). If not found, the function returns 0 (zero).

```
RAT( "ab", "abzaba" ) returns 4.
```

RECCOUNT()

Returns the number of records in the table as a long integer.

RECNO()

Returns the current physical record number as a long integer.

RIGHT(String, Length)

Returns the rightmost characters of the expression for the defined length. `RIGHT("xyzabc" , 3)` returns 'abc'.

SELECT()

Returns the workarea number for the current workarea as a long integer.

SPACE(Length)

Returns a string consisting entirely of spaces for the defined length.

STOD(String)

The inverse of `DTOS()`. `STOD()` converts a string formatted according to standard xBase storage conventions (CCYYMMDD) to an xBase Date formatted according to the Windows settings.

STR(Number, Length, Decimals)

Converts a number into a right justified string with decimals digits following the decimal point. The total length of the string is defined by the length parameter. `STR(RECNO() , 5 , 0)` is a common indexing element that ensures creation of unique keys if appended to another field element.

An index key using this expression could be built with `NAME + STR(RECNO() , 5 , 0)`

If the decimals parameter is omitted, the function defaults to zero decimals. If the length parameter is omitted as well, the length of the result is the length of the field.

STRZERO(Number, Length, Decimals)

Converts a number into a, zero-padded right justified string with decimal digits following the decimal point. The total length of the string is defined by the length parameter.

```
STRZERO( 1234, 10, 2 ) returns '0001234.00'
```

If the decimals parameter is omitted, the function defaults to zero decimals. If the length parameter is omitted as well, the length of the result is the length of the field.

SUBSTR(String, Start, Length)

Returns a portion of the string expression starting at the defined start location for the defined length.. `SUBSTR('xyzabcd' , 3 , 4)` returns 'zabcd'.

TIME()

Returns the system time as a string in the form HH:MM:SS.

TRANSFORM(Expression, Picture)

The Transform function converts strings and numeric values into formatted character strings. The function transforms the result of the first expression in accordance with the second picture string.

The picture string is made up of two parts. The first part is the Function string and it is optional for both strings and numeric values (as long as the second Template string is present).

A character string transformation picture may consist of only a Function string or only a Template or both.

A numeric picture must contain a Template string; the Function string is optional.

A logical value must contain only a Template string with Template characters L or Y.

The Function string consists of a leading @ character followed by one or more formatting characters. If the Function string is present, the @ character must be the first character in the picture string with its formatting characters immediately following and it may not contain spaces.

If a Template string exists as well, it follows the Function string. A single space separates the Function string and the Template string.

Function string characters allowed for numeric values are:

- B** left justify;
- C** display CR after positive numbers;
- X** display DR after negative numbers;
- Z** blank a zero value;
- (** encloses negative numbers in parentheses.

Function string characters allowed for strings are:

- R** inserts unassigned template characters;
- !** converts all alpha characters to upper case.

The @R Function requires a Template; the ! Function does not.

The Template string describes the format on a character by character basis. The Template string is made up of special characters which have specific results and optional unassigned characters which either replace characters or are inserted in the formatted string depending upon the absence or presence of the @R Function string.

Template assigned characters are as follows:

- A,N,X,(,#** are place holders and are interchangeable;
- L** displays logical values as T or F;
- Y** displays logical values as Y or N;
- !** converts the corresponding character to upper case;
- ,** (comma) or a space (in Europe) in a numeric template separate the elements of a number;

. (period) or , (comma - in Europe) in a numeric template specify the decimal position;
* fills leading spaces with asterisks in a numeric template;
\$ as the leading character in a numeric template results in a floating dollar sign being placed in front of the formatted number.

Example: Where "phone" is a character field holding a phone number with no formatting characters.

```
'transform(phone, "@R (###) ###-####")' returns '(909) 699-6776'.
```

If the formatting characters were actually present in the field, the "@R" function would be omitted

For numeric fields,

```
'transform(123456.78, "$9,999,999.99")' returns '$123,456.78'.
```

TRIM(String)

Removes trailing spaces from the string expression.

UPPER(String)

Converts the string expression into upper case. Character fields used in index expressions should always be converted to upper case to insure correct collating sequence.

VAL(String)

Converts a string of numeric characters into its equivalent numeric value. The conversion stops at the first non-numeric character encountered (or the end of the string).

```
VAL("123ABC") returns a value of 123.
```

YEAR(Date)

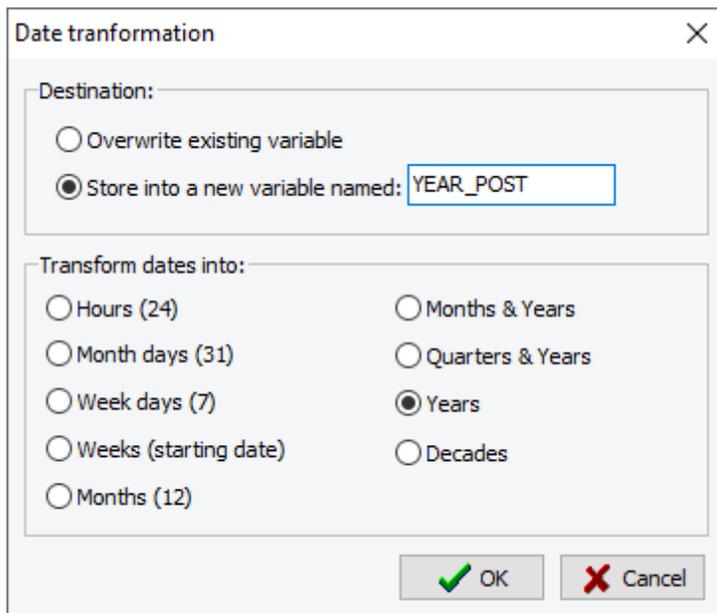
Returns the year portion of an xBase date as an integer.

Transforming Date & Time

The **Transform Date & Time** feature allows you to transform values stored in a date or a timestamp variable into hours (for timestamp variables), weekdays, weeks, months, month and years, quarters and years, years or decades and store the result into a new variable or replace the existing date or timestamp variables with the new values.

To transform a date or a timestamp variable:

- In the variable window, select the variable you want to transform
- Select the **TRANSFORM | TRANSFORM DATE & TIME** command from the **VARIABLES** menu. A transformation dialog box will appear with the following options:



- At the top of the dialog box the **Destination** section allows you to specify where the computation results will be stored. To transform the values of the selected variable, choose the **Overwrite existing variable** option. To keep the selected variable intact and store the result in another variable, select the **Store in a new variable named** option and type in the name of the new target variable in the edit box. If you enter the name of an existing variable, the program will ask you if you want to replace its values with those produced by the change. If the variable does not exist, the program will ask you to confirm the creation of the new variable.
- Select the desired transformation and then click **OK**

Computing Geographic Coordinates

Geocoding is the process by which geographical information such as place names, postal codes or IP addresses are transformed into corresponding geographic coordinates. QDA Miner can create geographic maps by relating coded segments with existing geographic coordinates such as latitude and longitude, or projected coordinates. While it cannot create maps directly from a city name or a postal code, it offers a geocoding service allowing you to transform such kinds of information into latitude and longitude.

QDA Miner can geocode four types of data:

- Cities, States/Provinces & Countries
- Country names
- Postal code or zip codes.
- IP addresses

This transformation process is performed using a geocoding server. It thus requires an Internet connection. The result is then stored in the project as numerical variables for the corresponding latitude and longitude. When an IP address is geocoded, you can also obtain a city name, a region and a country name and store the information into string variables. Once the variables are created, mapping can be done without the need of an Internet connection.

To access the geocoding feature:

- Select the **GEOCODING** command from the **VARIABLES** menu. You may also access this

feature by going through the mapping feature and then through the geographic coordinates setup dialog box. The geocoding dialog box looks like the one below:

The screenshot shows a dialog box titled "Geocoding" with a close button (X) in the top right corner. It is divided into several sections:

- From:** A dropdown menu currently showing "Cities, States/Provinces & Countries".
- Source variable(s):** A group box containing three dropdown menus and two text input fields:
 - Cities:** Set to "CITY".
 - States/Provinces:** Empty.
 - Countries:** Set to "USA".
 - Default value:** A text input field, currently empty.
- Output variables:** A group box containing four checkboxes and two text input fields:
 - City:** Set to "CITY".
 - State/Province:** Set to "STATE".
 - Country:** Set to "COUNTRY".
 - Latitude & Longitude:** Checked.
 - Latitude:** Set to "LATITUDE".
 - Longitude:** Set to "LONGITUDE".
 - Do not overwrite existing values (if exist):** Unchecked.
- Buttons:** "OK" (with a green checkmark icon) and "Cancel" (with a red X icon) buttons at the bottom.

- The **From** list box allows you to select the type of geographic information that can be geocoded. Once set, the dialog box automatically adjusts the **Source variable(s)** option box to display the information that needs to be specified. The above example displays the options for geocoding city names. Set the list boxes to the string variables containing the required information. You may also set default values for some fields. Those values will be used if no variables are selected, or if a specific case has a missing value for the selected variable. For example, if you want to geocode US zip codes, you may simply set the postal code variable to the string variable containing the zip code and type 'USA' or 'US' in the country default value text box.
- The **Output variables** group box allows you to specify the name of the numerical variables in which the **Latitude and Longitude** information will be stored. If the variables do not exist, the software will ask to confirm their creation. By default, if the variables already exist, their values will be replaced by new values. If you set the **Do not overwrite existing values** check box, only cases containing empty values will be geocoded. Such a feature may be useful when a secondary type of geographic information is used to complement a first geocoding. For example, if you have, for each case in a dataset, a postal code and an IP address, you may start by geocoding all cases with postal codes and then complement the cases with no postal codes or those for which not geographic coordinates could be found by geocoding their IP addresses.
- Once all the required options have been set up, click the **OK** button to perform geocoding. WordStat will use the current Internet connection to send all the information to be geocoded to a server that will return to WordStat the corresponding latitudes and longitudes. A report dialog will display a summary of the geocoding process, indicating how many items and cases have been successfully geocoded and how many items could not be geocoded. Clicking the **View** button will bring a list of all items that could not be geocoded. This table could then be saved on disk or printed, allowing you to easily identify cases that may need revision.

Mapping

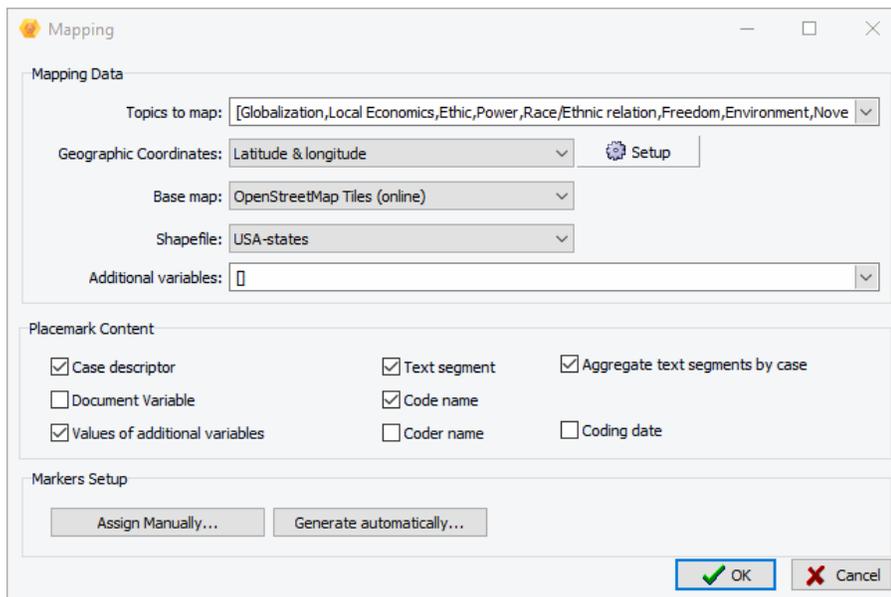
The mapping feature of QDA Miner allows you to analyze the spatial distribution of various codes. Mapping codes requires relating the codes to geographic location information stored in the project variables in the form either of longitude and latitude variables or of geographic projected coordinates (X and Y). In order to obtain such geographic information, QDA Miner allows you to compute latitude and

longitude data by transforming existing variables such as postal codes, city names, country names as well as IP addresses into their corresponding geographic coordinates. For more information on geocoding see [Computing Geographic Coordinates](#).

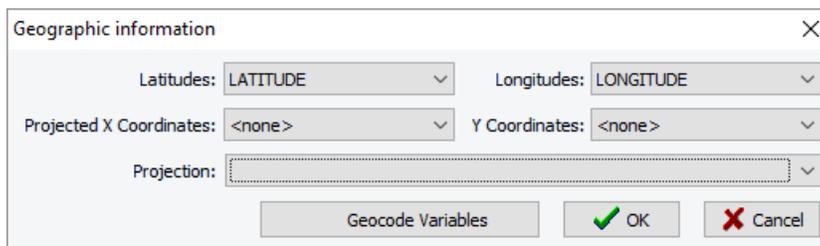
The mapping of codes function is available anywhere you see the  icon. You can find this icon in the Coding Retrieval, List Hyperlinks, Coding Frequency and Coding by Variable functions.

To map specific text features:

- Select rows of all items you want to map. For the Topic extraction tool, only one topic may be selected, yet several topics may be selected later.
- Click the  button. A dialog box similar to this one will appear:



- The **Topics to Map** checklist box displays all selected codes. You may add additional codes by clicking the down arrow key at the right end of the list box. You will be presented with a list of all available codes. Select all codes you want to map.
- The **Geographic Coordinates** allows you to select which set of variables contains the geographic location information to be used for mapping items. Two types of coordinates can be used: 1) latitude & longitude or 2) projected coordinates. Clicking the **Setup** button will bring a dialog box similar to this one:



You can associate existing numerical variables to geographical properties such as latitudes, longitudes or projected coordinates. In the latter case, you also need to choose the appropriate geographic projection. The dialog box also offers the possibility to geocode existing variables, computing latitude and longitude variables from other types of geographic information (see [Computing Geographic Coordinates](#)).

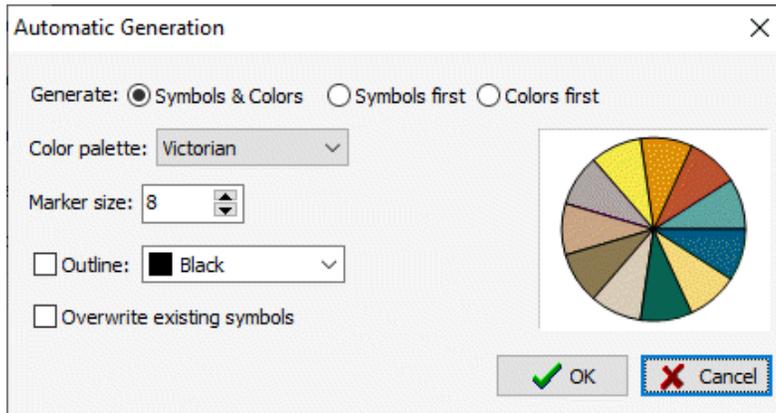
- The **Base Map** list box allows you to choose the background map on which data points will be plotted. It may consist of a web map service (WMS) or a geolocalized raster file (or world files). Web map services (identified with the 'online' suffix) require an Internet connection in order to retrieve relevant map files, while raster files may be used without connection. Setting this option to **Other...** will allow you to select an image file located on your current PC. This image file may consist of a satellite photo, a street map, a topographical map, or any other representation of a geographic region as long as it is accompanied by a World file that contains the appropriate information to convert the image coordinates to a real-world geographic coordinates. When a valid image file is selected, the user will be offered a choice to move this file to the default mapping resource folder or to leave the file where it is.
- The **Shapefile** list box displays the currently available shapefiles. Shapefiles are geospatial vector data format for GIS systems. They typically contain series of polygons, lines and points representing geographical objects, such as countries, states, counties, lakes, etc. Shapefiles are used in WordStat to create thematic maps in which areas are shaded or color-coded in proportion of specific measurements. QDA Miner provides a few basic shapefiles for representing either all countries or specific continents, as well as some detailed shapefiles for some cities or countries. Thousands of additional shapefile maps can be downloaded for free from various websites. Setting this option to **Other...** will allow you to select a shapefile located on your PC. When a valid shapefile is selected, the user will be offered a choice to move this file (along with all associated files) to the default mapping resource folder or to leave the file at its current location.
- The **Additional variables** checklist box allows you to transfer to the mapping module additional information stored in numerical, categorical, string or date variables. Values of those variables may then be used analysis, displayed or exported.
- The **Placemark Content** group of options allows you to select how data points will be created as well as what additional information will be used to describe each data point. The following information can be transferred: The **Case Descriptor** which is a user-defined string used to describe the case from which a specific text segment comes from, the **Document Variable** from which this text segment has been extracted, as well as the **Values of Additional Variables** (if any additional variable has been selected). You can also transfer the associated the **Text Segment**. Selecting the **Aggregate text segments by case** option will merge all the text into a single text segment and produce a single data point per topic. Additionally, you can transfer the **Code Name**, the **Coder Name** and the **Coding Date**.
- The **Markers Setup** section gives access to two dialog boxes that may be used to configure the appearance of markers (or placemarks). Selecting **Assign Manually** calls a dialog box that allows you to associate specific codes to specific symbols. The associations are stored in the project so that they can be reused later. Selecting **Generate Automatically** allows you to configure the sequence in which symbols are being generated. For more information on manual or automatic markers assignments see [Customizing Markers](#).
- Once all the settings have been adjusted, click the **OK** button to call the mapping module.

Customizing Markers

By default, QDA Miner automatically assigns various symbols to different topics, cycling through a list of symbols and colors to reduce the likelihood that two topics will have the same marker. You can customize the process by which QDA Miner assigns symbols and can adjust their visual properties such as their size and outlines. You can also customize symbols for specific topics, so that the same symbol will be used whenever this topic is mapped.

To customize the way symbols are automatically assigned:

- Click the **Automatic Generation** button. A dialog similar to this one will appear.



Generate: This option specifies how QDA Miner will cycle through symbols and colors. By default, the software changes both the symbols and the color for every consecutive topic. Selecting **Symbols first** will cycle through the seven symbols but keep the color constant, and will only change the colors when all symbols have been used. Selecting **Color First** will keep the symbols constant until all colors of the select color palette have been used.

Color palette: This option allows you to choose a set of colors to be used in the automatic markers generation process.

Marker size: This option lets you adjust the size of the marker.

Outline: When this option is checked, markers will be surrounded by a single line which color can be set using the color list box.

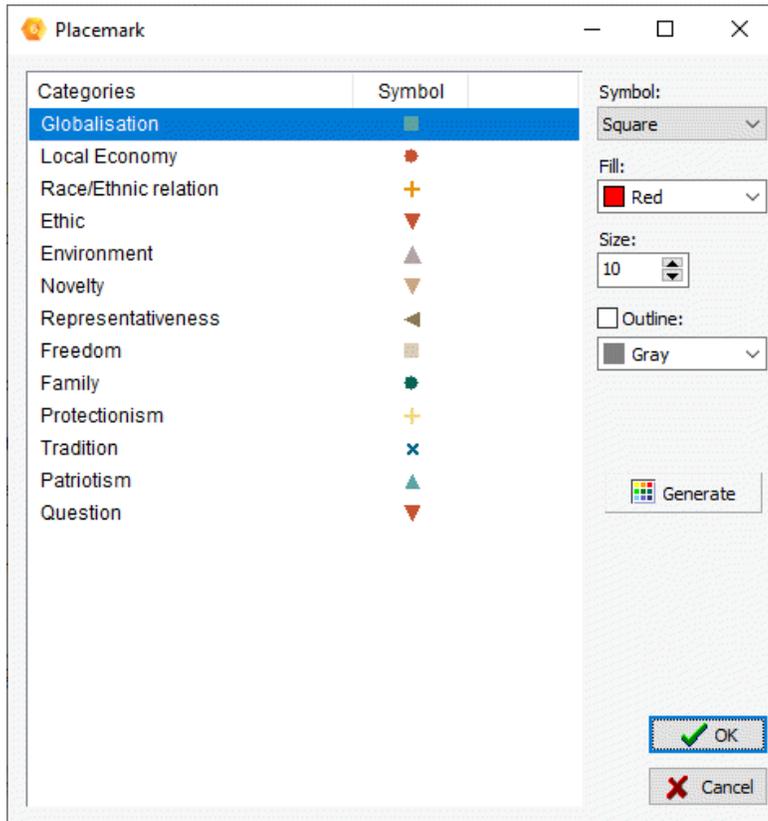
Overwrite existing symbols: When custom symbols have been assigned to specific topics, their symbols and colors will remain unchanged even if the automatic marker generation process is used for assigning symbols and colors to other topics. Enabling this option will cause the custom markers to be overwritten with new symbols and colors.

- Set your automatic generation options.
- Click **OK**.

By default, markers are automatically generated. However, custom markers can be assigned to specific topics, content categories, or words and saved within the project file so that the same marker will be used every time the codes are plotted. The customization feature also allows you to assign a bitmap or a letter to a text element.

To assign specific markers to text features:

- Click the **Assign Manually** button. A dialog similar to the one below one will appear.



- To assign a custom symbol to a word, a content category or a topic, you first need to select it from the list on the left of the dialog box and then adjust the following options:

Symbol: This list box displays the various symbols that could be used as markers for this item. **Bitmap...** will bring an open file dialog box that will allow you to choose a bitmap image file (*.bmp; *.bmp or *.bmp). When an image is selected, the following three options are disabled since they only apply for symbol markers.

Fill: This option allows you to choose a color to be used for the marker.

Size: This option lets you adjust the size of the marker.

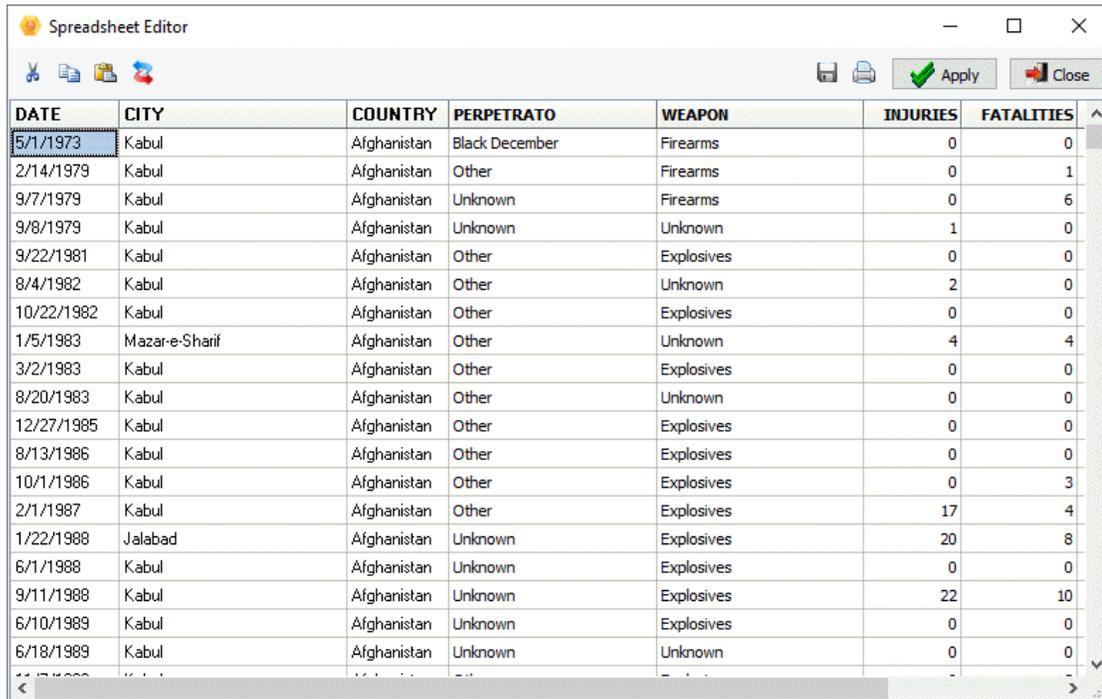
Outline: When this option is checked, the current marker will be surrounded by a single line. The color of this line can be set using the color list box below.

- To automatically assign initial markers to all items listed, click the **Generate** button.

Editing Values Using the Spreadsheet Editor

Entering numerical, date or string values to variables in many cases can be time consuming when performed in the QDA Miner main workspace, since the user only has access to the values of one case at a time and thus needs to move from one case to another. A much more efficient data-entry or data-editing approach is to use the QDA Miner spreadsheet editor.

- To call the editor, run the **SPREADSHEET EDITOR** command from the **VARIABLES** menu. A dialog box similar to this one will appear:



| DATE | CITY | COUNTRY | PERPETRATOR | WEAPON | INJURIES | FATALITIES |
|------------|----------------|-------------|----------------|------------|----------|------------|
| 5/1/1973 | Kabul | Afghanistan | Black December | Firearms | 0 | 0 |
| 2/14/1979 | Kabul | Afghanistan | Other | Firearms | 0 | 1 |
| 9/7/1979 | Kabul | Afghanistan | Unknown | Firearms | 0 | 6 |
| 9/8/1979 | Kabul | Afghanistan | Unknown | Unknown | 1 | 0 |
| 9/22/1981 | Kabul | Afghanistan | Other | Explosives | 0 | 0 |
| 8/4/1982 | Kabul | Afghanistan | Other | Unknown | 2 | 0 |
| 10/22/1982 | Kabul | Afghanistan | Other | Explosives | 0 | 0 |
| 1/5/1983 | Mazar-e-Sharif | Afghanistan | Other | Unknown | 4 | 4 |
| 3/2/1983 | Kabul | Afghanistan | Other | Explosives | 0 | 0 |
| 8/20/1983 | Kabul | Afghanistan | Other | Unknown | 0 | 0 |
| 12/27/1985 | Kabul | Afghanistan | Other | Explosives | 0 | 0 |
| 8/13/1986 | Kabul | Afghanistan | Other | Explosives | 0 | 0 |
| 10/1/1986 | Kabul | Afghanistan | Other | Explosives | 0 | 3 |
| 2/1/1987 | Kabul | Afghanistan | Other | Explosives | 17 | 4 |
| 1/22/1988 | Jalabad | Afghanistan | Unknown | Explosives | 20 | 8 |
| 6/1/1988 | Kabul | Afghanistan | Unknown | Explosives | 0 | 0 |
| 9/11/1988 | Kabul | Afghanistan | Unknown | Explosives | 22 | 10 |
| 6/10/1989 | Kabul | Afghanistan | Unknown | Explosives | 0 | 0 |
| 6/18/1989 | Kabul | Afghanistan | Unknown | Unknown | 0 | 0 |

This spreadsheet editor allows efficient data-editing operations. You can cut a cell or a range of cells and paste it into other rows, delete multiple cells, sort data, resize and rearrange columns, and print and save the spreadsheet to disk. To sort this list of hits in ascending order on any column values, simply click this column header. Clicking a second time on the same column header sorts the rows again in descending order. Columns may be reordered by dragging and dropping them in the desired location. Please note that pasting data from other cells can only be performed if the copied cells are from the same columns or if the data types are fully compatible.

Clicking down the  button forces QDA Miner to synchronize the table with the main window so that moving from one row to another will cause the main window to display the corresponding case and document from which the selected text comes. This feature is useful if you need to read the content of some documents in order to identify which value should be entered in a specific column.

Changes made to the spreadsheet data are not saved automatically. When a cell is modified, its background is set to a light-blue color, indicating that its value has been modified in memory but not yet applied.

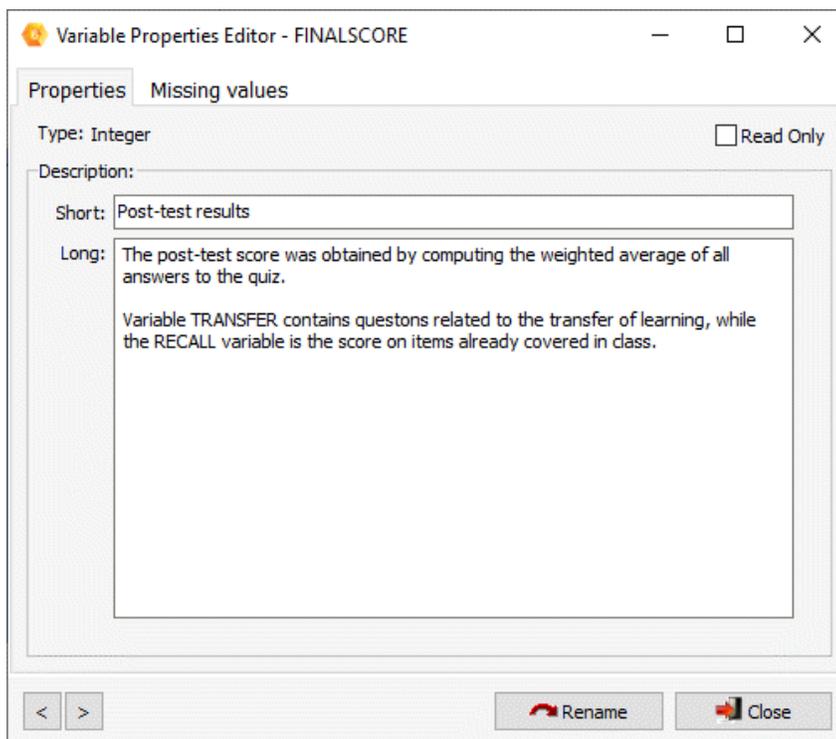
- To apply changes made in the spreadsheet editor, click the  button.
- To cancel all changes made to the values in the spreadsheet, click the  button. You will be asked to confirm the loss of all changes.

Editing Variable Properties

QDA Miner allows you to edit various properties of existing variables in your project. For example, you can attach a short and a long description to a variable, set the number of decimal places for floating-point numerical values, edit values of categorical variables, etc. You can also set an individual variable as "read only" or change its name.

To access the Variable Properties Editor dialog box:

- In the **VARIABLES** windows, position the cursor on the variable that you want to edit.
- Choose the **PROPERTIES** command from the **VARIABLES** menu, or right-click anywhere in the **VARIABLES** window and select the **EDIT PROPERTIES** command. This displays the **Variable Properties** dialog box as shown below.



Once in the dialog box, you can move through variables by clicking either the  or the  button. When viewing or editing the properties of a categorical variable, a second tab appears. You can add new values, as well as edit or delete existing ones on this page (see below).

The Properties Tab

The **Properties** tab of the dialog box offers the following options:

Read only: When selected, this option prevents a variable from being modified. This option is useful to prevent accidental or unauthorized changes to the values of a variable. To prevent the modification of data for an entire project file, see [Security & Multi-Users Settings](#). Setting a variable to "read only" only affects the editing of values in existing records, but still allows users to create new cases and assign values to these new cases.

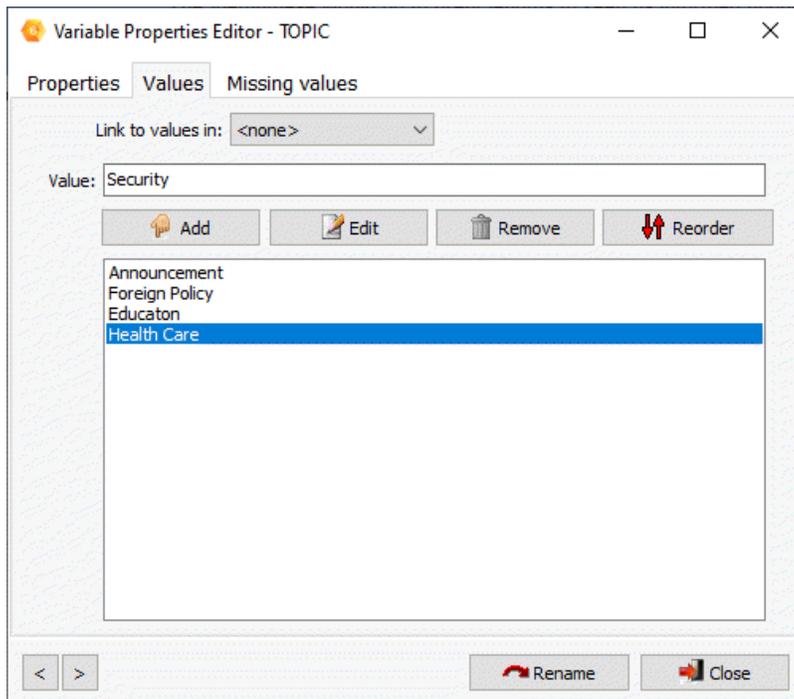
Type: The type of variable is shown here. If it is a string variable the number of characters permitted appears beside the variable type in brackets.

Description: This option lets you enter both a short single-line alphanumeric description as well as a detailed description of the variable. The short description is displayed in various locations in the program to remind users of the exact content of this variable.

Rename button: You can use this button to change the name of the current variable. When you click this button, you will be prompted for a new variable name. This new name must not exist in the current data file and should follow the basic rules for valid variable names.

The Values Tab

When viewing the properties of a categorical variable, a second tab is shown. The **Values** tab allows you to add new values, as well as edit or delete existing ones. The **Values** tab allows you to add new values, as well as edit or delete existing ones.



To add a new value labels:

- In the **Value** edit box, enter the string that will be used to describe this new value.
- Click the **Add** button.

To remove an existing value label:

- In the list box located in the lower half of this page, select the label you want to delete.
- Click the **Remove** button

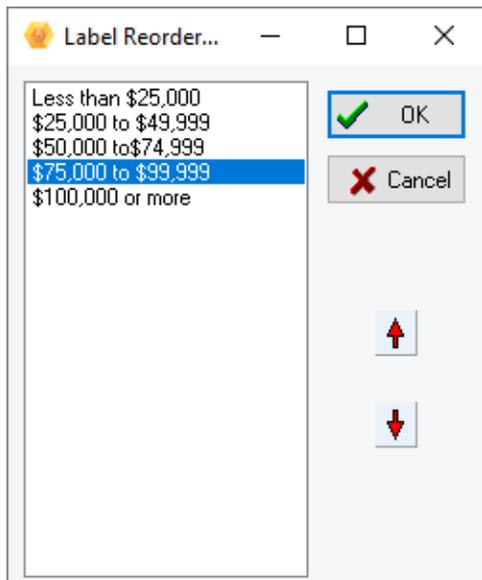
To edit an existing value label:

- In the list box located in the lower half of the page, select the label you want to edit.

- Click the **Edit** button.
- Once you finished editing the label, click the **OK** button to apply the change.

Reordering Value Labels

Ordinal variables assume a clear ordering of values. A good example of such a variable would be responses to a satisfaction questionnaire with values ranging from “Very Unsatisfied” to “Very Satisfied”, or an age group variable containing several age ranges going from “18 or less” to “60 or more.” To display the values in a proper order in various tables and to be able to apply some of the ordinal statistics available in QDA Miner, values of those variables should be properly ordered. The **Reorder** button allows you to change the natural order of values of ordinal variables. When this button is clicked, a dialog box like this one will appear:



- To reorder values, simply select the value you would like to move and click the up or down arrow button until the label is in the proper order.
- To confirm the reordering, click **OK**. To return to the original ordering of values, click the **Cancel** button.

Using an Existing Value Labels Definition

In some projects, several variables share the same value labels. For example, a questionnaire may use a common ordinal scale for several questions. Rather than re-entering the same value labels over and over again, QDA Miner can establish a link between a variable without value labels and an existing one that already contains labels.

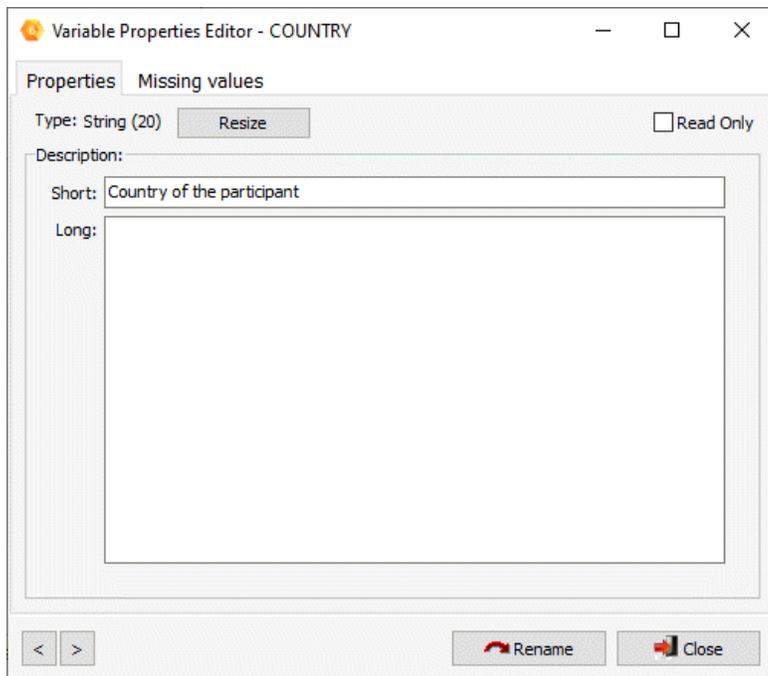
- To establish a link, click the down arrow button of the **Link to values in** list box.
- Then select from the list of variables the one containing the value labels you want to use. These labels will appear in the value list box.
- Once a link has been established, every change made to the value labels list will affect the labels associated with the original variable as well as with all other variables currently linked to this variable.

You may also use this feature to copy value labels from one variable to another. To do this, follow the previous instructions to link the current variable to the one from which you want to copy labels. The labels should appear in the value labels list. Then, remove this link by setting the **Link to values in** option to **none**. You may now edit the newly copied labels without affecting the labels of other variables.

Resizing a String Variable

When you create a string variable you are asked to determine the maximum number of characters the string can contain. If you find it necessary to modify the size of the string, you can do so by using the **Variables Properties Editor**.

- In the **VARIABLES** windows, position the cursor on the string variable that you want to edit. Choose the **PROPERTIES** command from the **VARIABLES** menu, or right-click anywhere in the **VARIABLES** window and select the **EDIT PROPERTIES** command. This displays the **Variable Properties** dialog box as shown below.



- The size of the string will be indicated in brackets beside the variable **Type**.
- Click the **Resize** button and a dialog box like below will appear.



- Adjust the number of characters to fit your needs using the **Up** and **Down** arrow buttons.
- Click **OK** when finished.

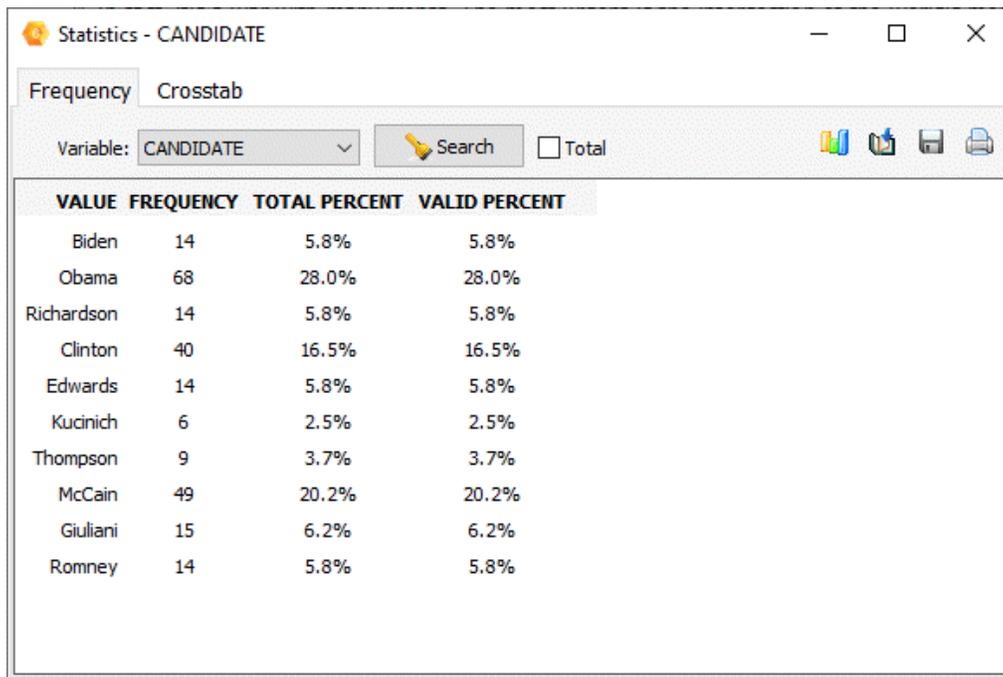
Variable Statistics

The **VARIABLES | STATISTICS** command allows you to quickly obtain the frequency and cross-frequency distribution of numerical, categorical, date and short-string variables. The univariate frequency table includes the frequency count for each value of the selected variable as well as the percentage of the count over all cases and over valid cases only. The contingency table describes the distribution of two variables simultaneously by displaying either the frequency or the row, the columns or the total percentages. Several types of charts may be created to illustrate the distribution or cross-frequency distribution of variables. You will find below a list of those charts.

Frequency Distribution

To obtain the frequency distribution of a variable:

- From the main QDA Miner screen, in the **VARIABLES** window, highlight the variable on which you would like to obtain distribution statistics.
- Select the **STATISTICS** command from the **VARIABLES** menu, or right-click and select the **STATISTICS** command.



You may obtain a frequency table on any other numerical, categorical, alphanumeric, and date variable by selecting its name in the **Variable** list box and then clicking the **Search** button.

To chart the distribution of a variable:

Clicking the  button allows you to obtain up to five types of charts to visually display the distribution of specific codes.

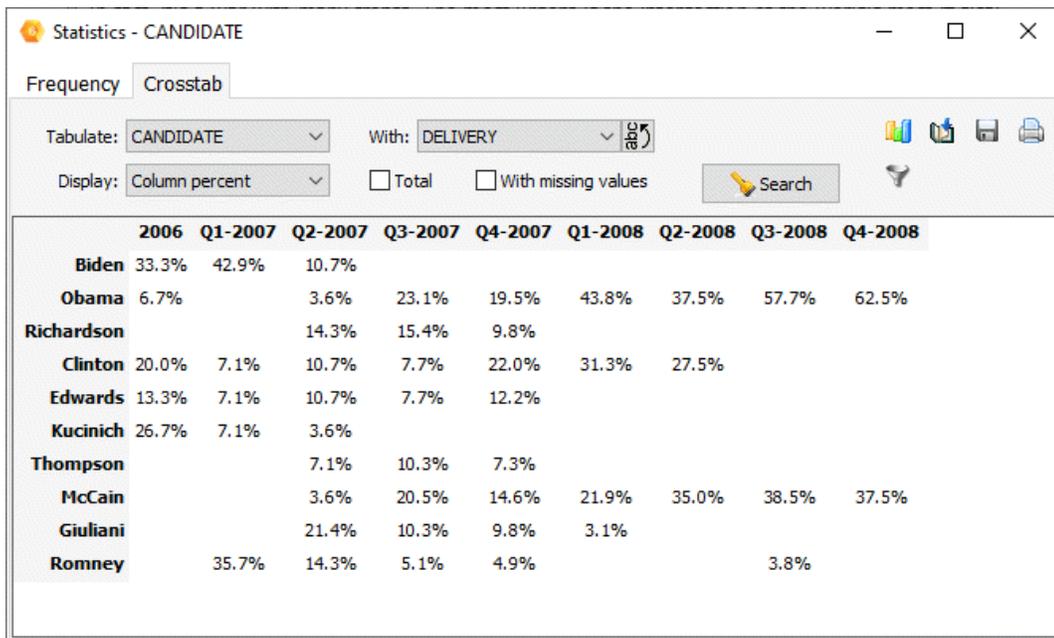
Some of the charts are available only for numerical and date variables (histograms and box-&-whiskers plots), while others like the bar charts and pie charts will be available in all situations when the total number of values is less than 100.

-  The vertical bar chart is the default chart used to display the frequencies of distinct values of a nominal or ordinal variable. It is especially useful to compare two or more values.
-  The horizontal bar chart displays the same information as the vertical bar chart. It is especially useful when the number of values is high and their labels cannot be displayed entirely on the bottom axis.
-  The pie chart is useful to display the relative frequency of each value and compare individual values to other values and to the whole. Numerical values displayed in pie charts are always expressed in percentages of either the total frequency or case occurrences.
-  The histogram graphically displays the distribution of a numeric variable. When selected, the program first separates the values into non-overlapping intervals of equal width, and then plots bars that represent the frequencies of each interval.
-  The box-&-whiskers plot can be used to examine the distribution of numerical variables. It is especially useful to detect the presence of outliers and asymmetry in the data distribution. The box includes values that fall between the first and the third quartiles (about 50 percent of the values). The line in the middle of the box represents the median value while the whiskers extend to the farthest observations within 1.5 times the interquartile range measured from the nearest quartiles. Values that are situated farther than 1.5 times the interquartile range but within three times this distance are represented by a dot, while values farther than three times the interquartile range from the nearest quartile are represented by the letter X (for extreme).

Joint Distribution of Two Variables

To obtain the joint distribution of two variables:

- Select the **STATISTICS** command, from the **VARIABLES** menu to display the **Statistics** dialog box (see above).
- Move to the **Crosstab** tab. The dialog box will be similar to the one below:



| | 2006 | Q1-2007 | Q2-2007 | Q3-2007 | Q4-2007 | Q1-2008 | Q2-2008 | Q3-2008 | Q4-2008 |
|-------------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| Biden | 33.3% | 42.9% | 10.7% | | | | | | |
| Obama | 6.7% | | 3.6% | 23.1% | 19.5% | 43.8% | 37.5% | 57.7% | 62.5% |
| Richardson | | | 14.3% | 15.4% | 9.8% | | | | |
| Clinton | 20.0% | 7.1% | 10.7% | 7.7% | 22.0% | 31.3% | 27.5% | | |
| Edwards | 13.3% | 7.1% | 10.7% | 7.7% | 12.2% | | | | |
| Kucinich | 26.7% | 7.1% | 3.6% | | | | | | |
| Thompson | | | 7.1% | 10.3% | 7.3% | | | | |
| McCain | | | 3.6% | 20.5% | 14.6% | 21.9% | 35.0% | 38.5% | 37.5% |
| Giuliani | | | 21.4% | 10.3% | 9.8% | 3.1% | | | |
| Romney | | 35.7% | 14.3% | 5.1% | 4.9% | | | 3.8% | |

- Select from the **Tabulate** list box the variable you would like to be displayed on the rows of the table.

- Select the variable you would like to be displayed at the top of the table by selecting its name in the **With** list box.
- In the **Display** list box, select the statistics you would like to be displayed in the table.
- Click the **Search** button.

To chart the joint distribution of two variables:

Bar charts or line charts are useful for visually comparing the joint distribution of two variables. To produce these types of charts:

- Set the **Tabulate**, **With**, and **Display** options so that the information to be viewed is displayed in the table.
- Click the  button.

For more information, see [Bar Chart and Line Chart](#).

To append a table to the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To exporting retrieved codes to disk:

- Click the  button. A **Save File** dialog box will appear.
- In the **Save as type** list box select the file format under which you would like to save the table. The following formats are supported: ASCII file (*.TXT); Tab delimited file (*.TAB); Comma delimited file (*.CSV); MS Word (*.DOC); HTML file (*.HTM; *.HTML); XML file (*.XML); Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV), and Stata data file (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.
- Type a valid filename with the proper file extension.
- Click the **Save** button.
- The obtained table can also be stored in a new project file, where each row becomes a new case and each column is transformed into a variable. This type of project file may be useful for performing a more detailed analysis of coded segments.

To print the table:

- Click the  button.

Computing Variables

The **VARIABLES | COMPUTE** command allows you to extract the computed result of the coded segments of a document variable according to a user determined indicator and store the result as a numeric or string variable. The resulting variables may later be used for computing coded statistics or to filter cases on the presence or absence of codes.

To compute a variable:

- Select the **COMPUTE** command from the **VARIABLES** menu. A **Compute Variables** dialog box like the one below will appear.

The screenshot shows the 'Compute variables' dialog box with the following settings:

- Search in:** [SPEECH]
- Compute:** Occurrence
- From:** [Globalization;Local Economy;Ethic]
- Variable names:**
 - Code name
 - Prefix: FRQ
- Variable type (occurrence):**
 - Multiple dichotomous variables
 - Multiple polynomial variables
 - Multiple string variables
 - Compound string variable
 - Order codes by descending frequency
- Maximum number of variables:** 3
- Buttons:** OK, Cancel, Preview »

Search in: This option allows you to specify which document variables the computation should be performed in. If the current project contains more than one document variable, you will have a choice of selecting either one or several document variables. By default, all document variables are selected. To restrict the extraction to only a few of them, click the arrow key at the right of the list box. You will be presented with a drop-down list of all available document variables. Select the document variables on which you want the computation to be performed.

Compute: This option allows you to determine the indicator that is used to quantify the coded segments. Choose the desired indicator from the drop-down menu. There are four options.

Occurrence: This option will compute whether a code occurs in a document variable without taking into account the number of times it appears.

Frequency: This option calculates how many times a code has been used in a document variable.

Word count: This option calculates the total number of words associated with a code in a document variable.

Rate per 1000 words: This option calculates the percentage of words associated with a code in a document variable.

From: This option allows you to select the coded segments on which the computation will take place. Select the codes from the checklist that is accessed by clicking on the arrow button on the right side of the field or by clicking on the  button and choosing from the **Code selection** checklist.

The **Variable names** section of the dialog box allows you to determine the name of the new variable(s). There are two options.

Code name: The new variable(s) will take the name of the selected code(s).

Prefix: This option allows you to define a prefix for the names of new variables. For example, if you type CODE as the prefix, QDA Miner will append a serial number, starting with 1 for all created variables (e.g. CODE1, CODE2, CODE3, etc.)

The **Variable type (occurrence)** section of the dialog box offers you different variable type display options. The available options change according the indicator chosen.

Multiple numeric values: This option stores the computed result of the coded segments is separate variables.

Compound string variable: This option allows you to store a large number of codes into a single string variable by concatenating the code names and the computed results in brackets beside. The **Order codes by descending frequency** option will store most frequent code names first, and the least frequent ones later. Such a variable may be used as a descriptive index of the codes contained in a specific case.

Multiple dichotomous variables: This option is only available for an **Occurrence** indicator. It consists of separate variables for each code listing the Boolean occurrence 0 or 1.

Multiple polynomial variables: This option is only available for an **Occurrence** indicator. It allows you to store a large number of codes into a smaller number of nominal variables. For example, if you have up to 50 codes assigned to open-ended questions, but no more than three codes per response, selecting this option and setting the **Maximum Number of Variables** option to 3 will allow you to store the occurrence of all fifty possible responses in only three variables.

Multiple string variables: This option is only available for an **Occurrence** indicator. It allows you to store a large number of codes into a smaller number of alphanumeric string variables. For example, if you have up to 50 codes assigned to open-ended questions, but no more than three codes per response, selecting this option and setting the **Maximum Number of Variables** option to 3 will allow you to store the occurrence of all fifty possible responses in only three variables.

To compute coded segments and store as a variable:

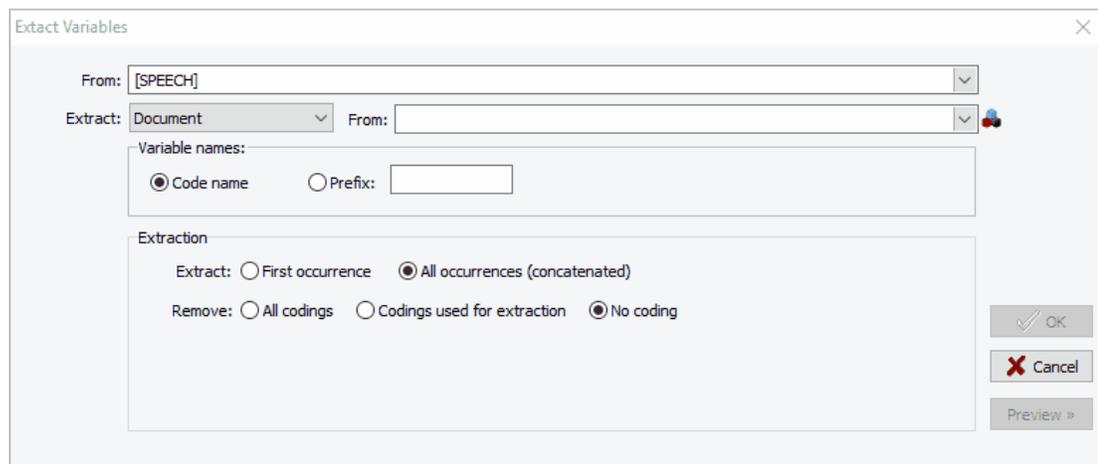
- Set your computation parameters.
- Click the **Preview** button to see the computation fits your needs.
- If so, click **OK** and the new variable(s) will be added in the **VARIABLES** window.

Variable Extraction

The **VARIABLES | EXTRACT** command allows you to extract coded text and store it as variables, either as a document or a string variable or as date, date & time or numeric values. This function can be useful when extracting relevant metadata from unstructured documents or transforming an unstructured project into a structured one.

To extract a variable:

- Select the **EXTRACT** command from the **VARIABLES** menu. A dialog box like the one below will appear.



Search in: This option allows you to specify which document variables the extraction should be performed in. If the current project contains more than one document variable, you will have a choice of selecting either one or several document variables. By default, all document variables are selected. To restrict the extraction to only a few of them, click the arrow key at the right of the list box. You will be presented with a drop-down list of all available document variables. Select the variables on which you want the extraction to be performed.

Type: This option determines the type of the new variable. Choose the type from the drop-down menu. The types available are document, string, integer, floating point, date, and date & time. The extract function searches in the chosen coded segments and extracts values of this type (if found).

From: This option allows you to select the coded segments from which the extraction will take place. Select the codes from the checklist that is accessed by clicking on the arrow button on the right side of the field or by clicking on the  button and choosing from the **Code selection** checklist.

The **Variable names** section of the dialog box determines the name of the new variable(s). There are two options.

Code name: The new variable(s) will take the name of the selected code(s).

Prefix: This option allows you to define a prefix for the names of new variables. For example, if you type CODE as the prefix, QDA Miner will append a serial number, starting with 1 for all created variables (e.g. CODE1, CODE2, CODE3, etc.)

The **Extraction** section of the dialog box enables you to determine what to extract. It will change according to the chosen type of variable for extraction.

Extract: The **First occurrence** option extracts text associated with the first occurrence of the chosen code(s) only. The **All occurrences (concatenated)** option will extract all occurrences of the text associated with the selected code(s). This option is only available when extracting to document or string variables.

Remove: This option is available only if you choose a **Document** variable type. When extracting coded segments and storing them into document variables, the coded segments may already contain some codings. This option allows you to decide which codings to keep and which ones to remove. If you choose the **All codings** option, the new variable will not contain any codings. If you choose the **Codings used for extraction option**, the new variable will keep all existing codings, except the one used for extraction. If you choose the **No coding option** all codings will be present in the new variable. These options won't affect existing codings in the original document.

Size: If you choose **String** as your variable type, you will be asked to specify how many characters in your string.

Delimiter: If you extract text to a **String** variable, and instruct QDA Miner to extract all occurrences, you will need to specify a delimiter that will be used to separate the various occurrences.

Date format: This option is available if your variable type is **Date** or **Date & Time**. It allows you to identify the format of existing dates in your document. Dates can be formatted in three different ways MDY (month, day, year), DMY (day month year) or YMD (year, month, day).

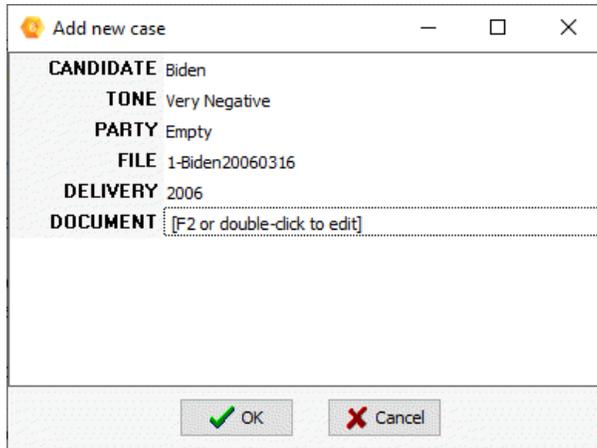
To extract coded segments and store as a variable:

- Set your extraction parameters.
- Click the **Preview** button to see if the extraction fits your needs.
- If so, click **OK** and the new variable(s) will be added in the **VARIABLES** window.

Adding a New Case

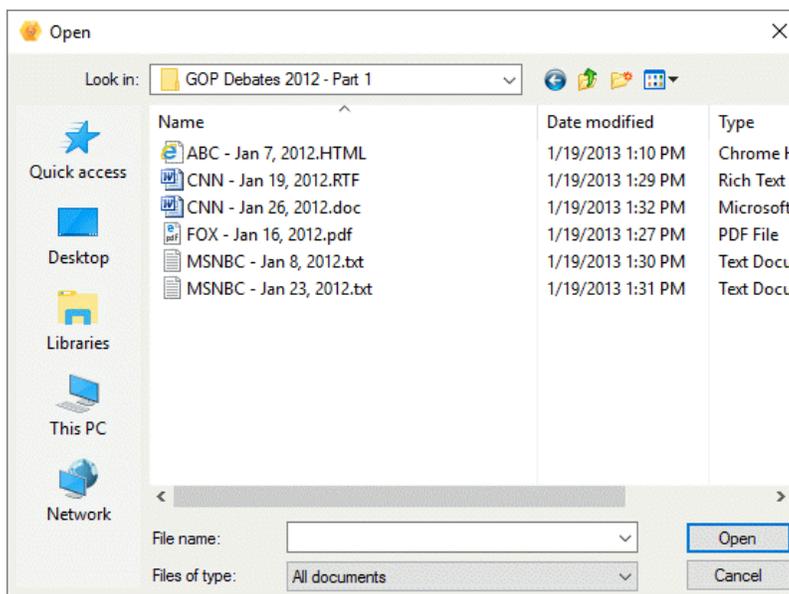
To create a new empty case:

- Select the **ADD** command from the **CASES** menu. A data entry form will appear allowing you to enter values for each variable in the current project.



| | |
|--------------------|------------------------------|
| CANDIDATE | Biden |
| TONE | Very Negative |
| PARTY | Empty |
| FILE | 1-Biden20060316 |
| DELIVERY | 2006 |
| DOCUMENT | [F2 or double-click to edit] |

- To enter a new value, click the data entry cell located to the right of the variable name that you want to edit. If the variable is numeric or alphanumeric, you can start typing the data you want to store in this variable. For categorical variables, dates and Boolean values, press the **F2** key or double-click the cell to display the list of available values or open a date editor. The tab key will take you to the next variable.
- To import a graphic file into an image variable, double-click the data entry cell or press **F2**. An open dialog box will appear, allowing you to select the graphic file to import.
- To enter text or import an existing file into a document variable, double-click the data entry cell or press **F2**. A text editor window will appear. You can start entering the text you want to store in this document variable. You can also import an existing document by selecting the **OPEN** command from the **FILE** menu or by clicking the  button. When you select this command, an **Open** dialog box will appear similar to the one below.



- Select the type of file you want to import. QDA Miner can read the following document types:

- RTF files (Rich Text Format)
- HTML documents
- ANSI files (or plain ASCII files)
- MS Word documents
- WordPerfect documents
- PDF documents

Other file formats such as InWriter/Notetaker, PocketWord may also be supported, depending on your system configuration.

- Once you have finished editing the document, select the **CLOSE** command from the **FILE** menu or click the  button located on the upper right corner of the editor.
- Click the **OK** button to confirm the creation of this new case.

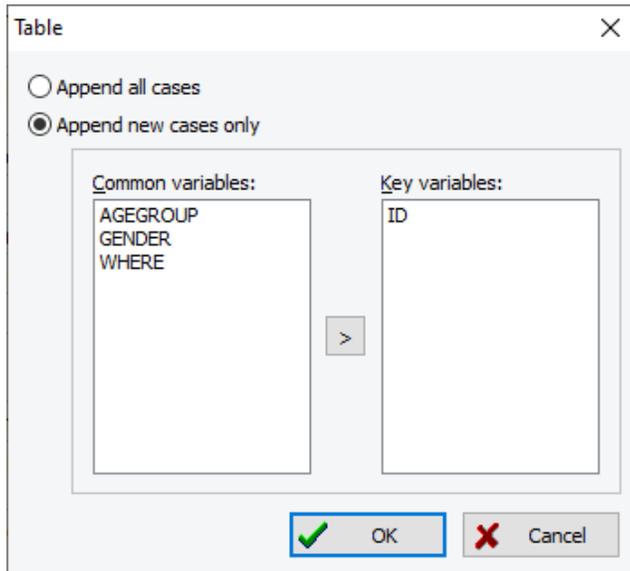
Adding New Cases from a Data File

The **CASES | APPEND FROM A DATA FILE** command allows you to append cases stored in an external data file to the current project. In order for data to be properly imported, both data files need to share variables with identical names and compatible data types (numerous type conversions are supported). If a variable do not exists in the external file or if its type does not match or cannot be converted, the value of this variable will be set to missing. QDA Miner can import cases stored in the following file formats:

- QDA Miner projects (*.ppj)
- Simstat data files (*.dbf)
- MS Excel spreadsheets (*.xls or *.xlsx)
- MS Access data files (*.mdb)
- Tab delimited files (*.tab)
- Comma separated value files (*.csv)
- Stata 8 to 16 data file (*.dta)
- SPSS data files (*.sav)

To append from a data file:

- QDA Miner will first ask you to select the data file containing the cases to be imported. It will then display a dialog box similar to this one:



If the **Append all cases** option is chosen, QDA Miner will import all cases found in this other file and store them as new cases in the current project.

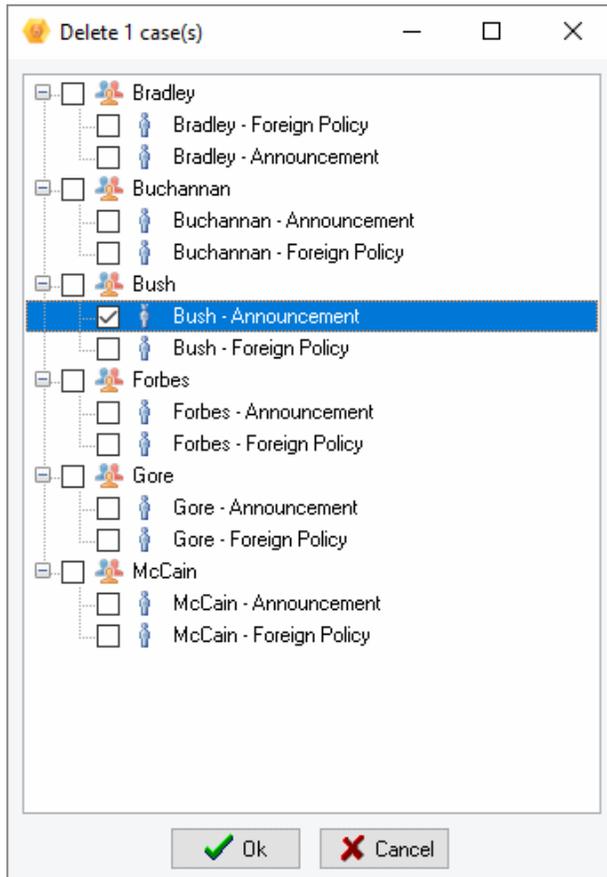
If the **Append new cases only** option is chosen, QDA Miner will require the identification of one or several key variables that will be used to differentiate already existing cases that should be ignored from new cases that will be appended to the current project.

To identify a key variable, simply select it in the **Common variables** list box and click the  button to move it to the **Key variables** list box. If a single key variable is identified, then all cases matching existing values in the current project will be ignored while all the other ones containing new values will be imported as new cases. If several key variables are chosen, a case will be considered as existing and be ignored only if it matches values on ALL the key variables.

Deleting Cases

To delete cases:

- Select the **DELETE CASES** command from the **CASES** menu. A dialog box appears showing all cases in a list view or a tree view.

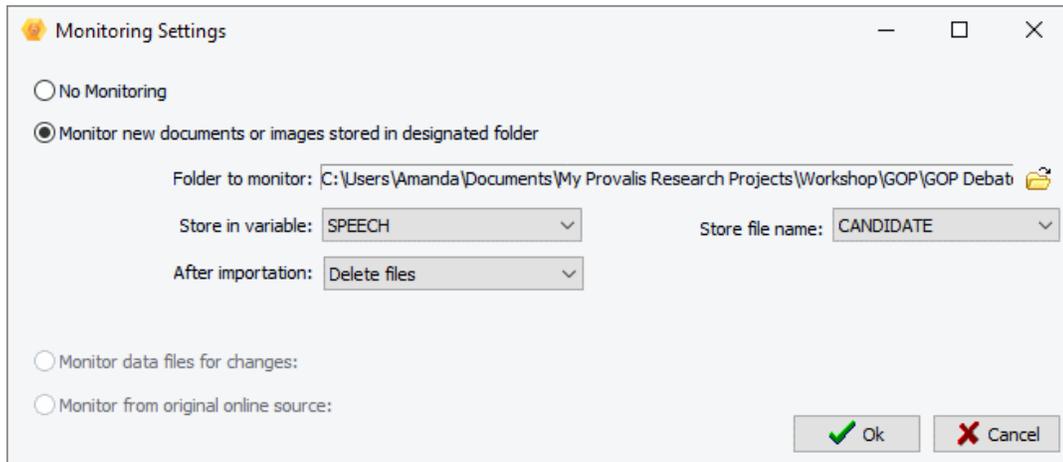


- Select the checkbox beside the cases you want to delete. By default, the current case is automatically selected.
- Once you have selected all cases you want to delete, click the **OK** button.

Monitoring a File or Folder

QDA Miner allows you to monitor a file, folder or online service for recent additions. You can configure your project to monitor a specific folder for newly added documents and images and import those documents. You can also monitor changes to data files or online service such as web surveys, email accounts or reference manager tools, allowing you to import any new cases, responses, emails, Tweets etc.

- To access this function select **APPEND | MONITOR EXTERNAL SOURCE** from the **CASES** menu. A **Monitoring Settings** dialog box similar to the one below will appear.



There are three types of monitoring that can be performed: monitoring a folder for new documents or images that have been added, monitoring individual data files for changes and monitoring from an online source. The options available to you are dependent on the data source of your project. Options that are not available to you will be grayed out.

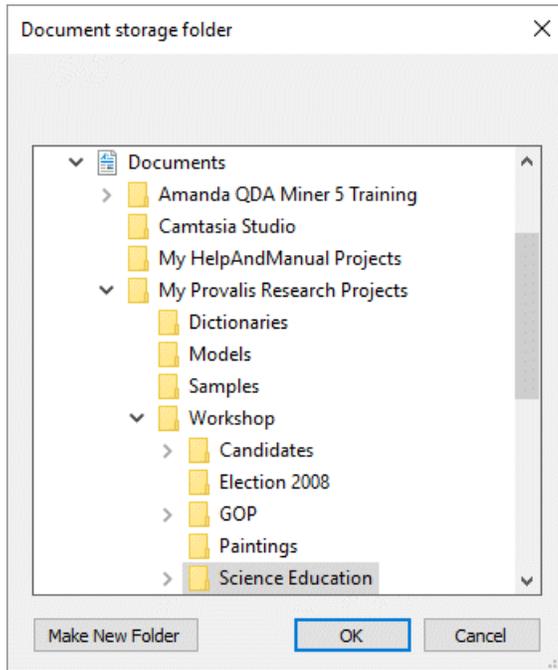
- Select the radio button that applies your project.

Monitoring a Folder

Adding relevant documents or images to an existing project normally requires you to open the project and perform some operations to append the newly found documents or images in the project. An easier way to import documents or images is to instruct QDA Miner to monitor a specific folder for any newly stored document or image. This allows you to quickly add new documents or images to existing projects without the need to open them or even run QDA Miner by simply saving or copying the desired documents or images to the folder being monitored. By specifying a folder on a cloud storage service such as Dropbox, Google Drive, or OneDrive, you can even add documents or images to a QDA Miner project located on a remote computer.

To monitor a folder for new documents or images:

- Click on the  button to the right of the **Folder to monitor** field. A **Document storage folder** dialog box appears.



- Select the folder that you would like to monitor or click the **Make New Folder** button to create a new one, and then click **OK**
- Set the **Store In variable** list box to the variable in which you would like to store the document.
- Set the **Store file name** list box to the variable in which you would like to store the name of the file.
- Using the **After Importation** list box, choose what you would like to happen once the new files are appended. You can delete files, move files to another folder or leave files where they are once they have been appended. If you choose to move a file once it is appended another field will appear. Click on the 📁 button and select folder to which you would like the newly append file to be moved.
- Click **OK**. Upon reopening the project, you will be notified if any new documents or images have been added to the folder that you are monitoring.

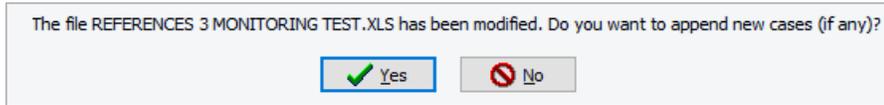
Monitoring a Data File

When a project has been created from a data file such as Excel, MS Access, Endnote, etc., QDA Miner stores the name and location of this file as well as its size and the date it was last modified and can be set to monitor changes to the file and, if needed, import new cases from the files. When such an operation is available, the **Monitoring data file for changes** option becomes enabled and may be chosen.

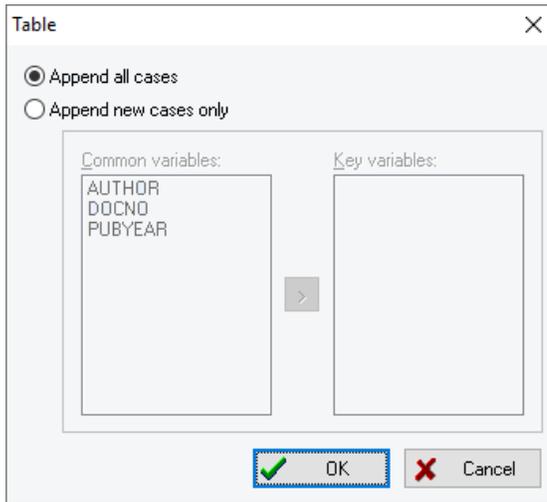
To monitor changes to individual data files:

The original source file path should appear next to this option. If the source file is not on your PC this option will not be available to you.

- Click the **Check Now** button to see if the file has been modified since you created your project or last appended from the data file. If the file has been modified a dialog box asking you if you want to append the new cases will appear.



- Select **Yes** and a **Table** dialog box will appear.



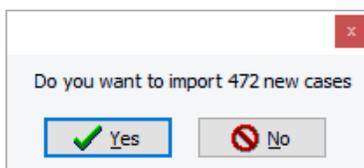
- Select whether you want to **Append all cases** or **Append new cases only**. If you choose to **append all cases**, this may result in projects containing duplicates, as some of the cases may have been imported previously. If you choose to **append new cases only**, only new rows that were added to the data file since the last importation will be appended. If you choose to append only new cases you must choose the common variable for the cases to be matched on.
- Click **OK** and the cases will be added to your project.

Monitoring an Online Source

When a project has been created from an online source such as a web survey platform, an online reference management tool or from Email services, QDA Miner stores with the project, the connection information needed to retrieve additional records. When this information is available, the **Monitoring original online source** option becomes enabled and may be selected.

To monitor from an online source:

- The online source will appear next to this option.
- Click **Check Now** button to see if new data has been collected by the online source. If so, a dialog box, similar to the one below, asking if you want to append the new cases will appear.



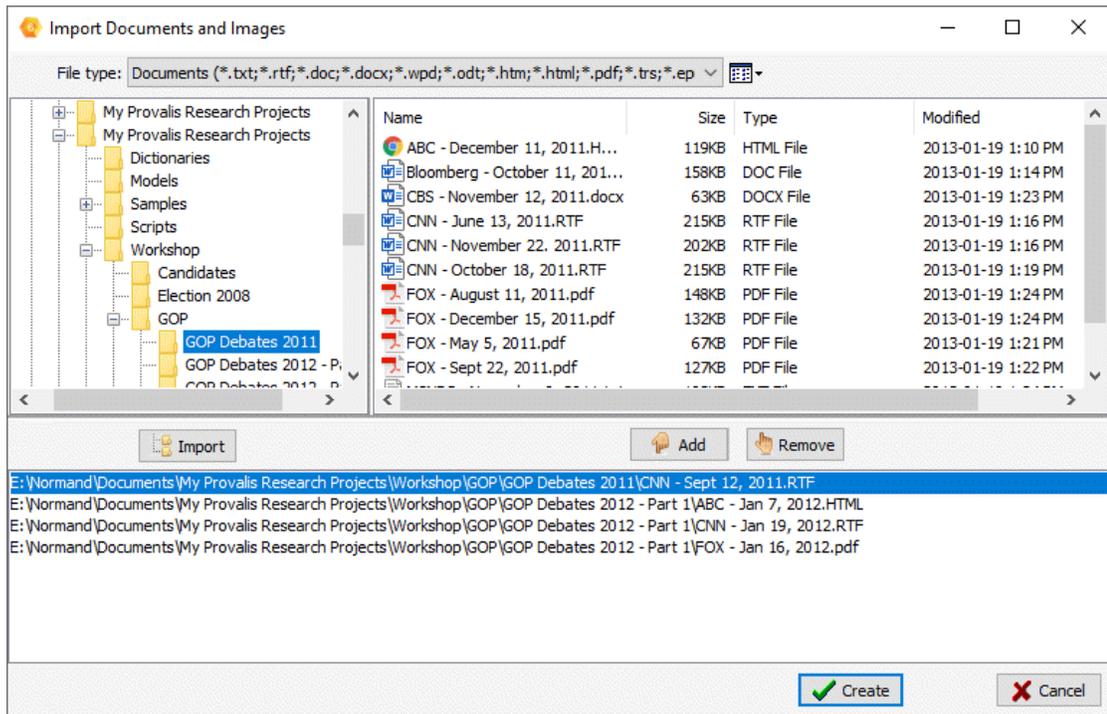
- Select **Yes** and the cases will be appended to the project.

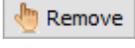
Note: If your online source is **Twitter**, **RSS** or **Facebook** once the data has been imported the **Posts** column in the **Web Collector** for the query in question will be reset to zero. Please see the [Web](#)

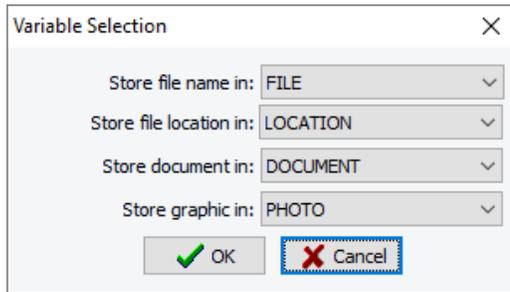
[Collector](#) section for more information.

Appending New Documents/Images

To append documents or image and store them in new cases, select the **APPEND DOCUMENTS/IMAGES** command from the **CASES** menu. A dialog box similar to the one below will appear:



- Click on a folder in the folders list on the upper left section of the dialog box to display its contents. If you want to see the contents of a drive, go to the folders list, click **My Computer**, and then double-click on a drive.
- In the upper right section of the dialog box, QDA Miner displays all supported document or graphic file formats that may be imported. To display only documents or images of a specific type, set the **File Type** list box to the desired file format.
- Click the file you would like to import. To select multiple files, hold down the **CTRL** key while clicking the other files.
- Click the  **Add** button to add those files to the list of files to import, located at the bottom of this dialog box. You may also drag the files from the top right section to this list.
- Click the  **Import** button to add numerous files contained within a folder. A dialog box will appear giving you the option of including **subfolders** and choosing **file types** to include in the import.
- To remove a file from the list of files to import, select that file name and click the  **Remove** button.
- Once all files have been selected, click the **Append** button. If the project contains more than one categorical, document or image variable, a dialog box similar to this one will appear:



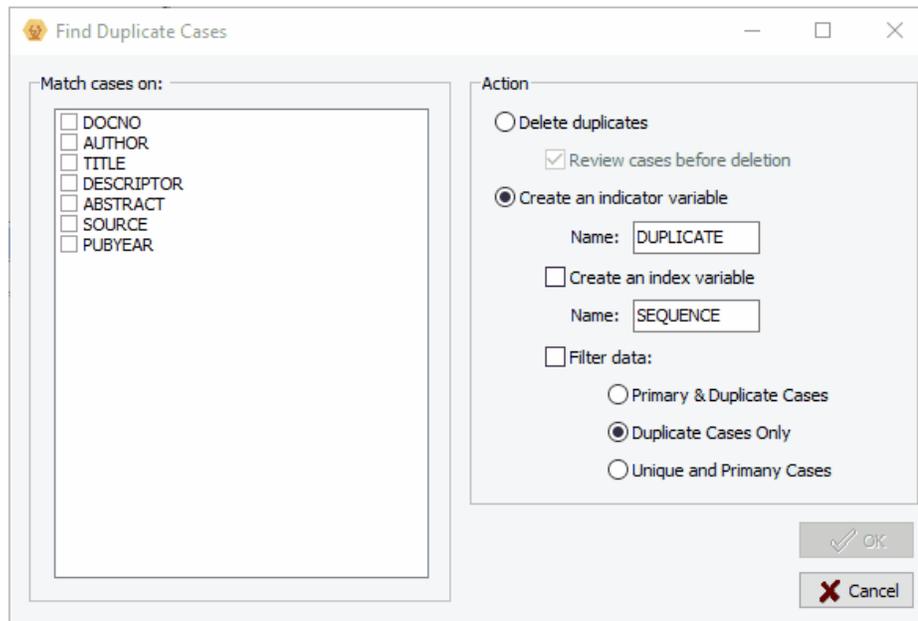
- Select the categorical variable in which the file name will be stored. Set this list box to **<none>** to prevent the program from storing this information in the project.
- If your project contains a LOCATION variable the **Store file location** option will be available. Select the variable in which you want the file location to be stored. This variable is created upon initially importing your documents by selecting the **Import file location** option when creating your project.
- Select the document variable where the imported documents should be stored.
- Select the image variable where the imported graphic should be stored.
- Click the **OK** button.

Identifying Duplicate Cases

Duplicate cases may occur for many reasons, including data importation, data entry or data management errors, or may naturally occur in Twitter and other online sources (ads, news lines, press releases etc.). Duplication may affect the accuracy of some statistics in QDA Miner as well as WordStat's ability to extract relevant features (topics, phrases, etc.). Use the **FIND DUPLICATES** command to identify, tag, select, filter out or delete duplicate cases.

To identify duplicate cases:

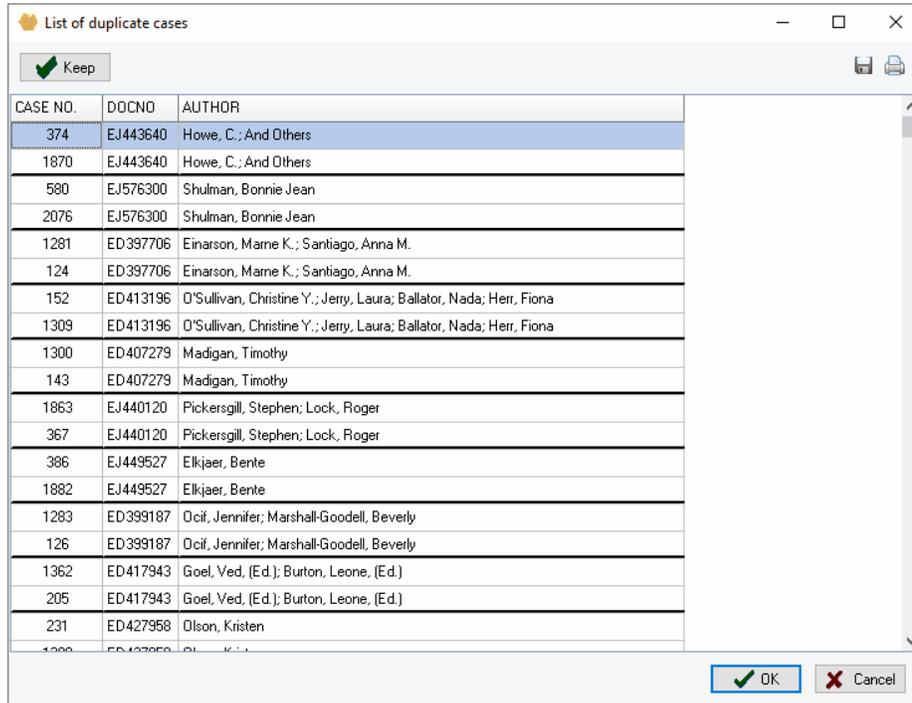
- Select **FIND DUPLICATES** from the **CASES** menu. A dialog box similar to the one below will appear.



There are two actions that you can perform. You can delete duplicate cases, with or without reviewing them first, or you can create an indicator variable that identifies duplicate, primary or unique cases. Selecting the second option also offers you possibility of creating an index variable for easy identification of primary and duplicated cases, and to filter cases based on the new indicator variable.

To delete duplicate cases:

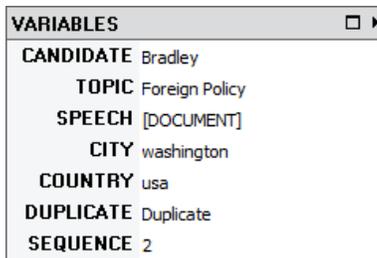
- Select the items from the **Match cases on** list box on the left side of the dialog box. These items are the variables that are compared to determine if a case is a duplicate.
- Choose the **Delete duplicates** option from the **Action** options.
- If you wish to immediately delete duplicate cases without reviewing them click **OK**. If you wish to **review the cases before deletion** check the corresponding box and click **OK**.
- A **List of duplicate cases** dialog box, like the one below will appear.



- Select cases you wish to retain, if any, and click **Keep**.
- When you are finished reviewing the list click **OK**.
- You will be asked to confirm that you want to delete duplicates case. If so, click **Yes**.

To create an indicator variable that identifies duplicate cases:

- Select the items from the **Match cases on** checkbox list on the left side of the dialog box. These items are the variables that are compared to determine if a case is a duplicate.
- Choose the **Create an indicator variable** option in the **Action** options and enter a **Name** for your new variable. The name of this variable should be descriptive so it is easily identifiable. We have chosen **DUPLICATE** as it clearly describes the information in the variable. The new variable is added to your **VARIABLES** window. For each case, this variable will have a value of unique, primary or duplicate. This allows you to easily identify duplicates.



When you create an indicator variable you have the options of **Creating an index variable** and **Filtering the data**.

To create an index variable:

- Select the **Create an index variable** checkbox if you would like to assign a number to each

unique case. Assigning an index variable can prove useful when using the [Case Descriptor](#) function, which will allow you to sort by sequence or group items on this variable to easily identify which cases have duplicates.

- Enter a **name** for the index variable in the corresponding field. The name of this variable should be descriptive so it is easily identifiable. We have chosen **SEQUENCE** in the example above as it clearly describes the information in the variable.

To filter cases on the indicator variable:

- Select the **filter data** checkbox to filter the data to upon the creation of an indicator variable. Choose the filtering parameters from the three options:

Primary & Duplicate Cases: Shows which cases have duplicates and how many.

Duplicate Cases Only: Allows you to see only the duplicates, without the primary cases.

Unique and Primary Cases: Filters the duplicates from the dataset.

- Click **OK**.

For more information on filtering data see [Filtering Cases](#).

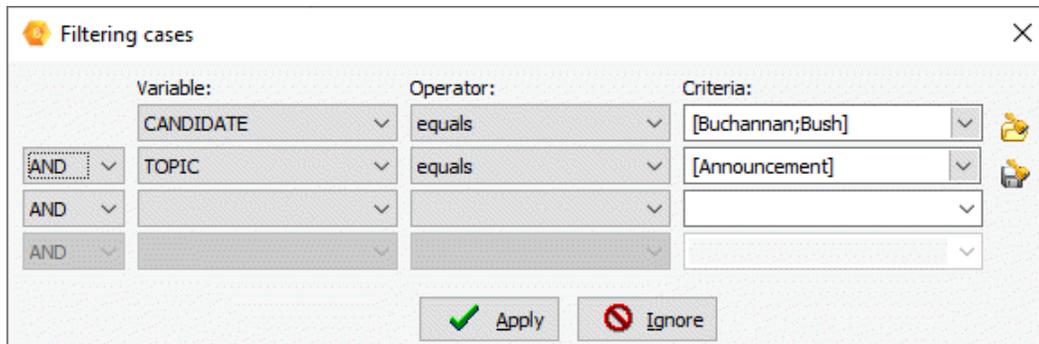
For more information on grouping and descriptors see [Setting the Case Descriptor and Grouping](#).

Filtering Cases

The **FILTER** command in the **CASES** menu temporarily selects cases according to logical conditions. You can use this command to restrict analysis to a subsample of cases or to temporarily exclude some subjects. The filtering condition may consist of a simple expression, or include up to four expressions joined by logical operators (AND, OR).

To filter cases:

- Select the **FILTER** command in the **CASES** menu. A dialog like the one below appears.



The following table shows the various operators available for each data type

| DATA TYPE | AVAILABLE OPERATORS |
|-------------------------|--|
| NOMINAL / ORDINAL | Equals Does not equal Is empty Is not empty |
| NUMERIC, DATE, DATETIME | & Equals Does not equal Is greater than Is lesser than Is greater than or equal to Is lesser than or equal to Is empty Is not empty |
| BOOLEAN | Is true Is false |
| STRING | Contains Does not contain Is empty Is not empty |
| DOCUMENT | Is empty Is not empty Is coded Is uncoded |
| IMAGE | Is empty |

Is not empty

- Once a filtering expression has been entered, you can apply the filter and leave this dialog box by clicking the **Apply** button. If the filter expression is invalid, a message will appear and exiting from the dialog box will not occur.

To temporarily deactivate the current filter expression, click the **Ignore** button. The filter expression will be kept in memory and may be reactivated by selecting the **FILTER CASES** command again and clicking **Apply**.

To store the filtering expression, click the  button and specify the name under which those filtering options will be saved.

To retrieve a previously saved filter, click the  button and select from the displayed list the name of the filter you would like to retrieve (for more information, see [Saving and Retrieving Queries](#)).

To exit from the dialog box and restore the previously active filtering expression, click the **Close** button.

Creating a Duplicate Copy of a Project

The **TEAMWORK | DUPLICATE PROJECT** command from the **PROJECT** menu provides an easy way to store an exact copy of the existing project under a different project name or into a different location.

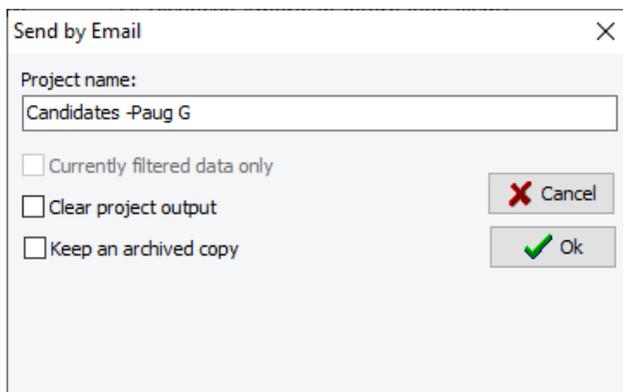
To create a new project with an identical structure as the current project but with only a subset of cases, use the **EXPORT | PROJECT FILE** command instead. To create such a file, set the case-filtering conditions of the active project to display the cases as they should be stored in the new data file (see [Filtering Cases](#)) before running the exportation command (see [Exporting Selected Cases](#)).

Sending a Project by Email

The **SEND BY EMAIL** command provides an easy way to electronically send a project to another team member or to any other interested party. If a case filter has been applied, you can choose to send the whole project or only the currently filtered cases. The project may be renamed to prevent any confusion and outputs in the **Report Manager** may also be deleted. The custom project is then stored in a compact ZIP archive and sent to the user as an email attachment. When executed, your default e-mail program is called allowing you to enter recipient names, add any additional information, or select any other options.

To send a project by email:

- If needed, filter the cases to display only the data that should be sent.
- Select the **TEAMWORK | SEND BY EMAIL** command from the **PROJECT** menu. A dialog box similar to the one below will appear:



- If needed, edit the project name.
- If a case filter is active, enable the **Currently Filtered Data Only** option if you want to send only those selected cases, or disable it to ignore the filter and to send all cases.
- Set the **Clear Project Output** option if you want to clear the content of the Report Manager of this project.
- If you want to keep a zipped copy of the project sent to the user, select the **Keep Archived Copy** option.
- Click the **OK** button. If an archived copy was requested, you will be asked to provide a destination for the ZIP file. The default email application is called.
- Enter one or more recipient names and type any required information.

Exporting Selected Cases

The **EXPORT | PROJECT FILES** command saves a copy of the current project under a different name or exports the project to another file format. QDA Miner supports the following export formats:

- xBase
- Excel
- Comma Separated Values
- Tab Separated Values
- Triple-S (XML standards for surveys)
- XML
- Stata 8, 13 and 14 file format
- REFI-QDA XML project file

When exporting a data file, QDA Miner will use the current filtering condition to determine which cases will be exported. The active sorting order will also be used to control the case sequence in the new file.

To export data to any of these applications:

- Set the filtering and sorting conditions of the active data file to display the records as they should be exported.
- Select the **EXPORT | PROJECT FILE** command sequence from the **PROJECT** menu.
- Select the file format you want to create using the **Save As Type** drop-down list.
- Enter a valid filename with the proper file extension.
- Click the **Save** button.

To create a project with a subset of cases:

The export feature can also be used to create a new data file with a structure identical to the current data file but with only a subset of cases.

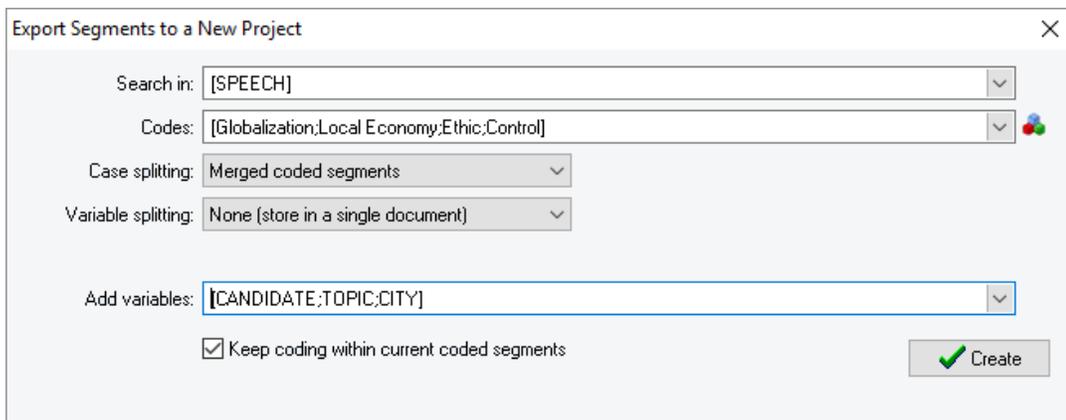
- Set the filtering and sorting conditions of the active data file to display the records as they should be saved in the new data file.
- Select the **EXPORT | PROJECT FILE** command sequence from the **PROJECT** menu.
- Set the **Save As Type** drop-down list to QDA Miner Project
- Enter a valid filename.
- Click the **Save** button.

Exporting Coded Segments

In some situations the format in which the data has been collected does not correspond to the design of a research project or is not appropriate for the kinds of analyses that need to be performed. For example, if you collect transcripts of group discussions and would like the unit of analysis to be the individuals, you will need to split the transcript so that interventions by each speaker will be stored in separate cases, creating for each participant a single new document of everything this person said. Another example would be when you have several structured documents but is only interested in analyzing specific sections of them and would like to eliminate unnecessary sections. You may also want to split the different sections of those documents and store each of those sections in separate document variables, allowing faster browsing through specific sections. Alternatively, you may want to regroup, under a single document, segments about a specific topic currently found in several document variables. The Export Coded Segments feature is a flexible data restructuring tool that may be used to perform all the above changes. It may also be used to transform a set of unstructured individual interviews into a structured database, storing answers to different questions into separate document variables or regrouping text about a specific topic discussed by an interviewer at different moments under a single document variable.

To perform this procedure:

- Select the **EXPORT | CODED SEGMENTS** command from the **PROJECT** menu. A dialog box similar to this one appears:



Search in: This option allows you to specify which document variables the extraction should be performed in. If the current project contains more than one document variable, you will have a choice of selecting either one or several document variables. By default, all document variables are selected. To restrict the extraction to only a few of them, click the arrow key at the right of the list box. You will be presented with a drop-down list of all available document variables. Select the variables on which you want the extraction to be performed.

Codes: This option allows you to select the codes defining the segments that should be extracted. To select codes, first click the arrow key at the right of the list box and then select the desired codes. You may also click the  button to select them from the codebook tree structure.

Case splitting: This option is used to specify whether the original case structure should be preserved or whether existing cases should be split into several ones based on the coding made of their documents. Three options are available. Choose **None (keep the same cases)** if you want to keep the same number of cases. If the **Every coded segments** option is selected, the program will extract each coded segment associated with any one of the specified codes and will store the segment in a separate case. For example, if a specific document contains five coded segments associated with Code A and three coded segments associated with Code B, this single document will result in eight new cases, each one containing a single text segment. If **Merged**

coded segments is chosen, a new case will be created for each selected code. This new case will contain all segments associated with this code. So, if a specific document contains five coded segments associated with Code A and three coded segments associated with Code B, this single document will result in the creating of two cases, one containing all five text segments associated with Code A and the second one containing the three text segments associated with Code B.

Variable splitting: This option can be used to specify whether extracted segments should be stored in a single document variable or in different ones. The available options depend on the setting of the **Case Splitting** option and will be any one of the following:

None (store in a single document): Use this option to store all extracted segments in a single document variable named SEGMENT.

Current document variables: When segments are extracted from several document variables, this option will create a project with the same document variables as those specified in the **Search In** option and will store the extracted segments in the variable from which they come.

Above codes: This option will create for each code selected in the **Codes** option a separate document variable and will store text segments associated with specific codes in their corresponding document variable.

Other codes: This option is available only when the **Case Splitting** option is set to **Every Coded Segment** or **Merged Coded Segments**. It allows you to further split the text segments extracted from the first step into separate document variables based on a second list of codes. An application of this would be splitting a group discussion so that codes associated with individuals are used to create different cases and storing them in different document-variable text segments associated with different topics.

Add variables: This drop-down checklist box may be used to append the values of existing variables to the exported data file along with the extracted text segments.

Keep coding within current coded segments: By default when extracting coded segments, codes used to extract the coded segments as well as those codes enclosed in the extracted segments are both stored along with the extracted text and are displayed in the new project as new coded segments. The current codebook is also copied to the new project file. Disabling this option removes all codes and codings from within the resulting project, and will create a project without this codebook.

Exporting Documents

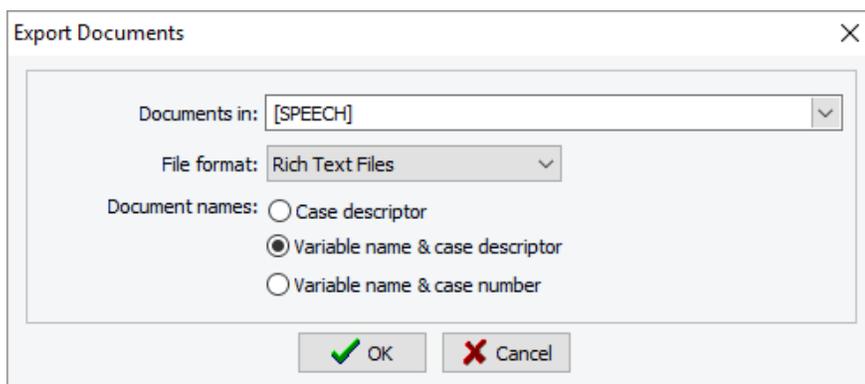
The **EXPORT | DOCUMENTS** command saves all documents in a project file associated with one or several document variables into separate files. QDA Miner supports the following document formats:

- Rich Text
- HTML
- Plain text file

When exporting documents, QDA Miner will use the current filtering condition to determine which documents will be exported.

To export documents to disk:

- Set the filtering condition of the active data file to display the cases containing the documents you want to export. If you want to export all documents, remove any filtering condition.
- Select the **EXPORT | DOCUMENTS** command sequence from the **PROJECT** menu. The following dialog box will appear:

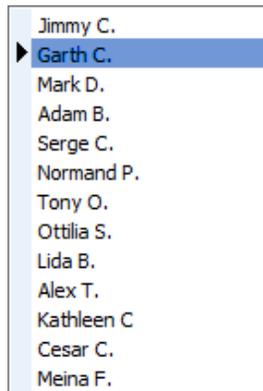


- Select the variables containing the documents you would like to export to disk.
- Set the **File Format** option to the desired format.
- In the **Document Names** option, select the method that should be used to automatically create file names.
- Click the **OK** button. You will be asked to specify a folder under which document files should be stored.

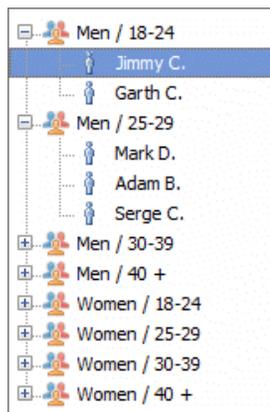
Setting the Cases Descriptor and Grouping

The **CASES** window shows all currently active cases in the project. By default, cases are listed in their order of creation and are identified by their physical position in the data file (e.g. case #1, case #2, etc.). However, you can edit the list order, group cases in categories, and define a custom descriptor that will be used to identify a case based on the values contained in one or more variables.

There are two major ways to display the active cases. They may be displayed either in a single sorted list or grouped by categories based on the values of one or two variables. The example below shows a list of cases sorted alphabetically on interviewee name.



The second example below shows the same cases grouped by gender and age.

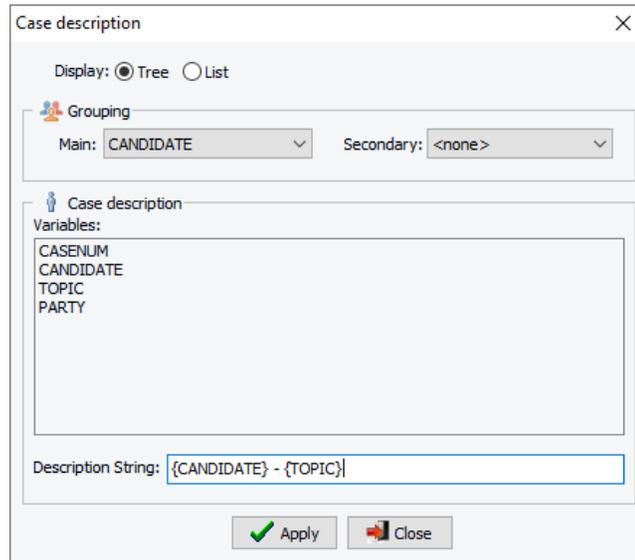


In this last example, all cases appear in a tree in which each node represents the combined value of the grouping variables. You can display or hide cases under this category by clicking the + or - sign located to the left of the node or by double-clicking the node itself. To display or edit a specific case, simply select its case descriptor.

Note: Displaying cases grouped in a tree means that the program must read all cases in the project, which may cause some delays when working with large data files containing several thousand cases. For this reason, when working with such a large project, cases should be displayed as a list.

To adjust the descriptors and organize cases:

- Select the **GROUPING/DESCRIPTOR** command from the **CASES** menu. The following dialog box will appear:



Display: This option lets you select whether cases will be displayed in **Tree** mode or as a single **List**.

When you choose to display cases in a **Tree**, you will be asked to provide up to two variables that will be used to group cases. The **Main** list box allows you to select the first grouping variable, while the **Secondary** list box allows you to further break down the cases into the subcategories defined by these two variables. For example, if you choose GENDER as the main grouping variable and AGE as the second grouping variable, and if we assume that the AGE variable contains only three values (16, 17 and 18), cases will be grouped under the following six categories:

MALE - 16
 MALE - 17
 MALE - 18
 FEMALE - 16
 FEMALE - 17
 FEMALE - 18

If you choose to display cases in a single list, cases will be displayed by default in their order of creation. The **Main** and **Secondary** list boxes may however be used to re-order those cases and display them sorted in ascending order on one or two variables.

Case Description: This section of the dialog box allows you to specify a label that will be used to describe each case. The label may be changed by editing the text in the **Description String** edit box. To insert the value stored in a specific variable into the description, simply enter the variable name in uppercase letters and enclose this name between braces. Alternatively, you can insert a variable name at the current caret location by clicking the corresponding item in the **Variables** list located just above the edit box.

If you enter the following string:

```
{GENDER} subject - {AGE} years old
```

The {GENDER} and {AGE} strings will be replaced with their corresponding value for this specific case. If the current case contains information about a seventeen-years-old male, the above string will be displayed as:

```
Male subject - 17 years old
```

It is also possible to insert the following string:

{CASENUM}

This string will display a unique case number, representing the physical order of this case in the project file.

Importing a Document in a Case

The **DOCUMENT** window allows users to enter text directly in the document editor or paste text from the clipboard. It is also used to import an existing document stored on disk into the project.

To import a document into an existing case:

- From the **CASES** window, select the case in which you would like to store the document.
- If your project contains more than one document variable per case, make sure the **DOCUMENT** window points to the proper document by selecting its name from the list box on the title bar of this window.
- Select the **DOCUMENT FILE | IMPORT** command from the **DOCUMENT** menu or click the  button on the document editor toolbar. An **Open file** dialog box will appear.
- Select the file format of the document that you want to import from the **Files of Type** list box located at the bottom of this dialog box.
- Highlight the file name that you want to import and click **OPEN**.

Please note that importing a document will overwrite existing text stored in the currently selected document. To append a file to an existing text, simply select this text, copy it to the clipboard, import the new document, and paste the text back in the proper location.

To import a document into a new case:

- Select the **ADD** command from the **CASES** drop-down menu. A data entry dialog box will appear.
- Double-click the document variable to access the text editor.
- Select the **OPEN** command from the **FILE** menu or click the  button on the editor toolbar. An Open File dialog box will appear.
- Select the file format of the document that you want to import from the **Files of Type** list box located at the bottom of this dialog box.
- Highlight the file name that you want to import and click **OPEN**.
- Exit the editor by selecting the **CLOSE** command from the file window or clicking the  button.
- After entering data for other variables, click the **OK** button.

Importing an Image in a Case

To import an image into an existing case:

- From the **CASES** window, select the case in which you would like to store the image.
- If your project contains more than one image variable per case, make sure the **DOCUMENT** window points to the proper variable by selecting its name from the list box on the title bar of this window.
- Select the **FILE | IMPORT** command from the **IMAGE** menu or click the  button on the Image

Editor toolbar. An **Open File** dialog box will appear.

- Select the file format of the image that you want to import from the **Files of Type** list box located at the bottom of this dialog box.
- Highlight the file name that you want to import and click the **OPEN** button.

Please note that importing a graphic will overwrite the existing image stored in the currently selected variable.

To import an image into a new case:

- Select the **ADD** command from the **CASES** drop-down menu. A data entry dialog box will appear.
- Double-click the image variable to access the Image Editor. An **Open File** dialog box will appear.
- Select the file format of the image that you want to import from the **Files of Type** list box located at the bottom of this dialog box.
- Highlight the file name that you want to import and click the **OPEN** button.
- After entering data for other variables, click the **OK** button.

Saving Operations

To save your project:

- Select **SAVE** from the **PROJECT** menu.

To save your project under a different name:

- Select **SAVE AS** from the **PROJECT** menu.
- Choose a new name for your project and the location where it will be saved.

Archiving a Project

During a research project, data files are frequently modified (cleaning, coding, etc.). At some point you may need to return to a previous version of an existing data file to recover lost variables or cases that have been transformed or deleted, or just to make routine verifications. In order to do this, several successive backup copies of this data file should be created and kept. Another reason to make backup copies of data files is to prevent the accidental loss of an entire data file caused by a hardware failure or a software malfunction.

QDA Miner provides a simple archiving procedure that allows users to quickly create backup copies. This procedure stores a copy of the currently active project and all its related files (structure definition, documents, codebook, value labels, etc.) in a single compressed file. QDA Miner uses the industry standard ZIP format as its own archive file format so that you can easily manage these archives files outside QDA Miner using any application that can manipulate these files. As well, the high level of compression achieved on typical QDA Miner data files (usually more than 90-95%) allows you to store backup copies of large projects in much smaller files and thus keep several copies of your data file on your hard drive without sacrificing precious disk space.

Another benefit of this archiving feature is to facilitate the transfer of your data file and all its related files to another computer by creating a single file that includes all associated files.

Creating Backups

To make an archived copy of the current data file:

- Select the **MAINTENANCE | BACKUP | CREATE** command sequence from the **PROJECT** menu. A Save File dialog box will appear.
- Set the drive and directory setting to the location in which you want to store the compressed file.
- Enter a valid file name and click **OK**

To restore a file from an archived copy:

- Select the **MAINTENANCE | BACKUP | RESTORE** command sequence from the **PROJECT** menu. An **Open File** dialog box will appear, displaying all ZIP files.
- Select the proper ZIP file and click the **OK** button. A second dialog box will appear, prompting you to specify the location in which data should be restored. The default location is the same directory

as the archive file. If needed, change the drive and directory setting and click the **OK** button to proceed with the extraction.

- Once the file has been extracted click it to open the project.

Scheduled Backups

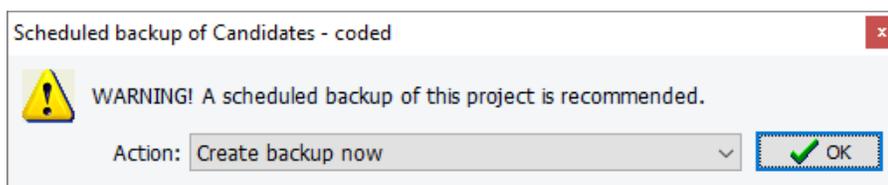
Even though creating backups can be easy in QDA Miner, sometimes you will fail to perform those backups, forget about them or simply lose track of when a backup on a specific project has last been done. For this reason, we implemented in QDA Miner an automatic backup feature for project files. This backup is set by default to occur one month after the last time a backup was performed, and will be prompted only if some changes have been made to the project. You can set a different time cycle for scheduled backups or disable this feature by accessing the Project Properties dialog box.

To set an automatic backup reminder:

- Select **PROPERTIES** from the **PROJECT** menu. A **Project properties** dialog box appears.
- Got to the **Miscellaneous** tab. In the **Automatic Backup** section, select the **Prompt for backup every** checkbox.
- Choose the desired time interval.
- Set the location where you want the back up to be saved by typing its path in the **Default folder** field or clicking on the folder button to the right of the field and choosing the backup location from the dialog box.
- Click **Ok**.

When QDA Miner detects that a scheduled backup is due to run:

- a dialog box like the one below will appear:



This dialog box offers a choice among four types of actions:

Selecting **Create backup now** will institute the backup creation procedure described previously and will require a backup name and location.

The **Skip backup** option can be used to ignore the warning and delay the backup until the next time the project is accessed.

Selecting **Postpone the backup (another cycle)** will also ignore the warning but it will reset the time counter to the current date so that the next request for backup will occur only after the defined time period.

Finally, **Adjust the scheduled backup** will institute the Project Property dialog box, allowing you to either disable the scheduled backup feature or adjust how often the backup will be prompted.

- Choose the desired action from the drop down and click **OK**.

Merging Projects

The QDA Miner **MERGE** command allows you to combine two or more project files into one. This operation is achieved by opening a "master" project that will act as the recipient and then selecting external project files from which information will be retrieved. The **MERGE** command will perform up to 4 types of data imports in a single operation.

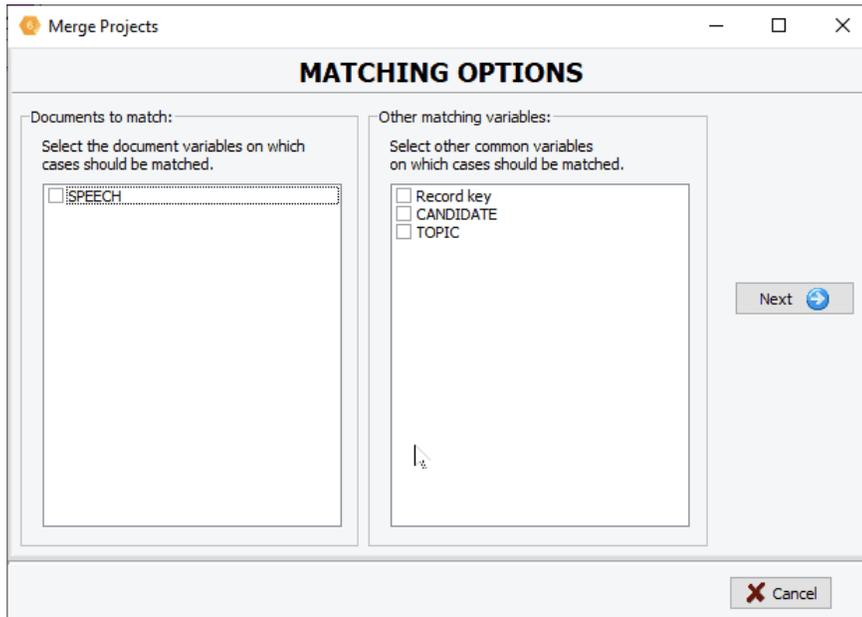
- It will attempt to match cases, documents and images and to import for common documents and images any code assignment that is not already in the master project.
- If necessary, it will also import the codebook from the external file and merge its codes and categories into the existing codebook (see also: [Importing a Codebook](#) for the single importation of codebooks from other projects).
- If the program cannot match cases in the imported project to existing ones in the main project, it can optionally append those cases along with their associated documents and codings.
- If the imported project contains unique variables, the program will allow selecting from those variables the ones that should be appended to the existing master project.

This merging feature allows you to synchronize your own work performed on different computers. As well, individuals or a number of team members may work on distinct sets of documents and then merge them along with their associated codings into a single master project.

This feature may also be used by a team of researchers working on the same set of data. They can perform their own coding and editing on their own copy of a master project file, working on different computers at different times. Once individual coding and data editing has been done, they can then combine all codes assigned by each researcher into a single project file. Such a scenario may be used to divide the amount of work among several people. It may also be useful to assess the reliability of coding made by different coders, by allowing different researchers to code independently the same sets of documents (for more information how to assess the reliability of coding, see [Assessing Inter-Coders Agreement](#))

To merge two project files:

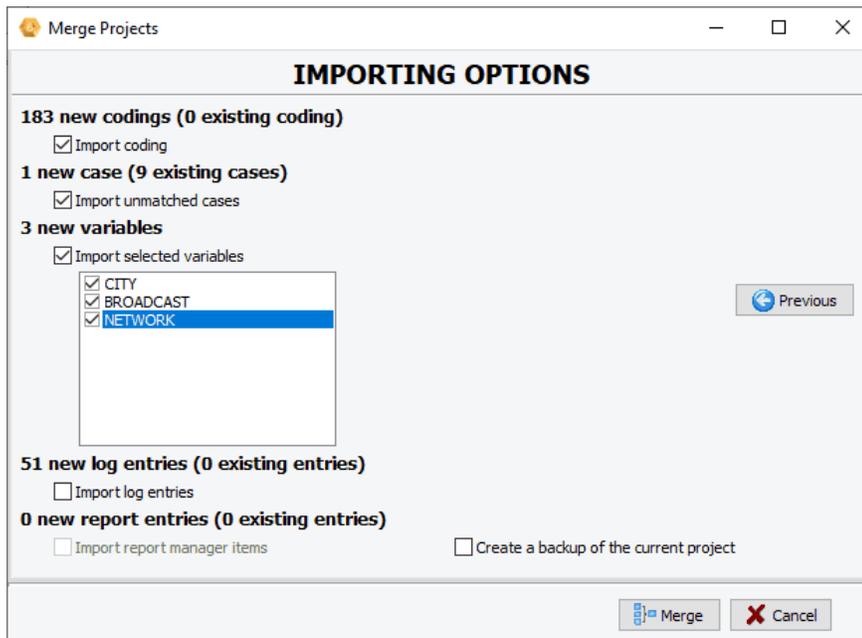
- Open the project in which the information currently contained in other project files will be stored.
- Select the **TEAMWORK | MERGE** command from the **PROJECT** menu. An **Open** dialog box will appear.
- Select the second project from which to import codes, coding, cases, or variables. The following dialog box will appear:



In order to merge coding made to duplicate documents stored in different projects files, QDA Miner needs to decide whether two documents are the same. This is performed by comparing the first 200 alphanumeric characters in each document (if the document is shorter, its entire text is compared). Spacing, parentheses and punctuation marks, as well as any other formatting characters including tabs and end-of-lines, are ignored. While it is unlikely that two documents will start exactly the same way, such a situation may still occur, especially when dealing with very short responses. To prevent such a situation from occurring, it is possible to instruct the program to consider a match when two cases share identical values on other variables found in both project files.

The first list box on the left side of the dialog box is used to specify on which documents this pairing should be made. Since coding may only be imported for documents that have been previously matched, this list box also specifies where the codings to be imported are located.

- After selecting at least one document/image variable, select from the list of all variables that are common to both files any other variables on which the pairing of cases should be made. Two cases will be considered identical only if all the selected documents/images and all the values of those selected variables are the same.
- Once the matching options are set, click the  button. This will instruct QDA Miner to apply the matching criteria, check for possible conflicts, and then move to the second page of the dialog box. If two records in the master project share the same values on all selected variables, QDA Miner will display an error message stating that the master project contains duplicate entries. If the selected key variables are unique to each case, then the program will move on to the next page.



The second page of the dialog box previews the predicted outcome of the merging operation and specifies what should be imported. Depending on the nature of the information stored in the second project file, up to five import options will be available:

Import coding: While attempting to match cases on common documents, QDA Miner also compares all the codings applied to those documents. If it finds codings that do not exist in the master project, it will offer the option to import those codings. The number of new codings that would result from a merge is reported at the top of the second page of the dialog box, as is the number of common codings found in both project files. Select the **Import coding** box to instruct QDA Miner to import those additional codings. Note that this option only applies to documents contained in both project files. Any new document imported by the addition of new cases or new variables will always be merged into the current project along with all its associated codings.

Import unmatched cases: After attempting to pair all cases in both project files, QDA Miner will report the number of cases in the second project for which no match has been found. Select this option to append those cases to the end of the current project.

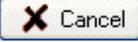
Import selected variables: If some variables are unique to the imported project file, it will be possible to integrate all or some of those unique variables into the main project by enabling this option and selecting from the list of variables located below those that should be imported.

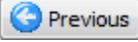
Import log entries: Log entries stored in the command log may be appended to the current log file.

Import Report Manager items: If some quotes, tables and charts have been added to the Report Manager from within the secondary project, the number of new items will be listed here. Importing those entries will append them to the current project and will be accessible from the Report Manager. However, please note that modified versions of items already in the project will not be imported.

Merging several projects into a master file may result in several important changes to the original project file. Some of those changes may not correspond to what was expected. Since it could be very difficult to reverse all the changes resulting from a merge and recover the original project file as it was before this operation, **it is highly recommended either to perform this operation on a copy of the original project file or to create a backup of your original project before merging any data into it.** While the creation of backups may be performed at any time in QDA

Miner by using the **MAINTENANCE | BACKUP** command, an option has been added to this dialog box to facilitate the access to the **BACKUP** command. Enabling this option will instruct the program to first perform a backup of the current project file before importing begins.

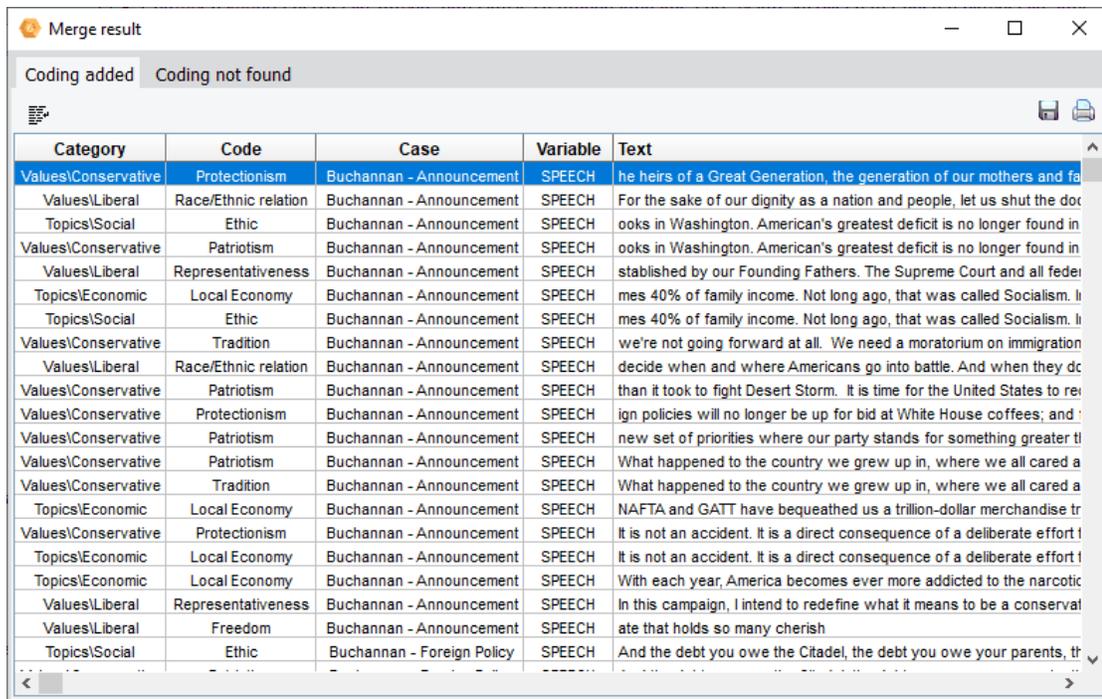
To cancel the merging operation and return to the QDA Miner main screen, click the  button.

To go back to the first page of the dialog box to adjust matching settings, click the  button.

- Once ready, click the  button to begin merging the projects. If the backup option has been set, you will be presented with a dialog box that will ask you to specify the name of the backup file. The program will then import all the information and will display a message summarizing the changes made to the master project.

Reviewing Imported Coding

When QDA Miner imports codings, it attempts to match the original text and location of a coding in the imported project to a segment of the master document that points to the exact same text and the same or nearby position. However, it may sometimes fail to find the proper location, usually because one of the two documents has been modified. After importing codings, QDA Miner displays a dialog box with a list of all codings added to existing documents as well as any coding that could not be assigned to the documents in the master project (see below).



The screenshot shows a dialog box titled "Merge result" with two tabs: "Coding added" and "Coding not found". The "Coding added" tab is active, displaying a table with the following columns: Category, Code, Case, Variable, and Text. The table lists various codings with their corresponding categories, codes, case names, variables, and text snippets.

| Category | Code | Case | Variable | Text |
|---------------------|----------------------|---------------------------|----------|--|
| Values\Conservative | Protectionism | Buchanan - Announcement | SPEECH | he heirs of a Great Generation, the generation of our mothers and fa |
| Values\Liberal | Race/Ethnic relation | Buchanan - Announcement | SPEECH | For the sake of our dignity as a nation and people, let us shut the dor |
| Topics\Social | Ethic | Buchanan - Announcement | SPEECH | ooks in Washington. American's greatest deficit is no longer found in |
| Values\Conservative | Patriotism | Buchanan - Announcement | SPEECH | ooks in Washington. American's greatest deficit is no longer found in |
| Values\Liberal | Representativeness | Buchanan - Announcement | SPEECH | established by our Founding Fathers. The Supreme Court and all fede |
| Topics\Economic | Local Economy | Buchanan - Announcement | SPEECH | mes 40% of family income. Not long ago, that was called Socialism. I |
| Topics\Social | Ethic | Buchanan - Announcement | SPEECH | mes 40% of family income. Not long ago, that was called Socialism. I |
| Values\Conservative | Tradition | Buchanan - Announcement | SPEECH | we're not going forward at all. We need a moratorium on immigration |
| Values\Liberal | Race/Ethnic relation | Buchanan - Announcement | SPEECH | decide when and where Americans go into battle. And when they dc |
| Values\Conservative | Patriotism | Buchanan - Announcement | SPEECH | than it took to fight Desert Storm. It is time for the United States to re |
| Values\Conservative | Protectionism | Buchanan - Announcement | SPEECH | ign policies will no longer be up for bid at White House coffees; and |
| Values\Conservative | Patriotism | Buchanan - Announcement | SPEECH | new set of priorities where our party stands for something greater tl |
| Values\Conservative | Patriotism | Buchanan - Announcement | SPEECH | What happened to the country we grew up in, where we all cared a |
| Values\Conservative | Tradition | Buchanan - Announcement | SPEECH | What happened to the country we grew up in, where we all cared a |
| Topics\Economic | Local Economy | Buchanan - Announcement | SPEECH | NAFTA and GATT have bequeathed us a trillion-dollar merchandise tr |
| Values\Conservative | Protectionism | Buchanan - Announcement | SPEECH | It is not an accident. It is a direct consequence of a deliberate effort t |
| Topics\Economic | Local Economy | Buchanan - Announcement | SPEECH | It is not an accident. It is a direct consequence of a deliberate effort t |
| Topics\Economic | Local Economy | Buchanan - Announcement | SPEECH | With each year, America becomes ever more addicted to the narcotic |
| Values\Liberal | Representativeness | Buchanan - Announcement | SPEECH | In this campaign, I intend to redefine what it means to be a conservat |
| Values\Liberal | Freedom | Buchanan - Announcement | SPEECH | ate that holds so many cherish |
| Topics\Social | Ethic | Buchanan - Foreign Policy | SPEECH | And the debt you owe the Citadel, the debt you owe your parents, th |

The first tab of this dialog box displays all the codings that have been added to the master project. The second tab displays any coding which QDA Miner was unable to locate. This second table of unmatched coding includes the text to which this code had been originally assigned in order to make the match manually.

Selecting an item in this table, either by clicking it or by using the keyboard cursor keys (such as the UP or DOWN arrow keys), will automatically display the corresponding case and document name in the main window and will select a portion of the document text located near the code. If slight changes have been made to either version of the document, the highlighted segment in the main window should be relatively close to the correct location.

To manually adjust the location of an unmatched code:

- Click the  button. The selection resizing tool will appear:



- From this dialog box, click the corresponding arrow button to move the starting or ending location of the selected text in the main window. Clicking a < button moves the chosen limit of the selection to the left and up while clicking a > button moves this limit to the right and down. Repeat the same move several times by clicking and holding the mouse button down. Release the mouse button when done.
- Once the selection has been adjusted to closely match the text originally associated with this code, click the  button to assign this code to the new selection.

Clearing All Code Assignments

A researcher may want to start over with a fresh uncoded project or create a copy of the original project without any coding in order to allow someone else to code the same set of data. To clear all codings made to the current project:

- Select the **MAINTENANCE | CLEAR ALL CODINGS** command from the **PROJECT** menu, and click **Yes** to confirm the deletion of all code assignments.
- As an extra precaution, a dialog box will be displayed requiring the typing of the word **YES** in an edit box. Typing **YES** and clicking **OK** will result in the removal of all codings and their associated memos.

To remove specific codings, see [Removing Code Assignments](#).

Retrieving Misplaced Codes

When a code is assigned to a selected segment of a document, the code itself is stored within this document at the exact location where it was assigned. The associated coding will always be preserved, even if a portion of text or an entire document is copied to the clipboard and pasted somewhere else (whether in the original project or another one) or if it is saved to a disk as an RTF document. This method of storing codings instead of keeping an index of their location has the advantage of allowing you to modify the original document without the risk of corrupting the coding index. However, one inconvenience is the possible insertion within a project of documents already containing codings for which there is no corresponding code in the current project codebook. A software or hardware malfunction causing an abrupt termination of the program may also result in the loss of some codes in the codebook or in some codings being left without a corresponding code.

The **RETRIEVE MISPLACED CODES** command instructs QDA Miner to browse through all the documents in the current project and search for any coding without an associated code in the codebook and to append any new code to the existing codebook. All new codes will be stored under a special category named **Recovered**.

To run this command, select the **MAINTENANCE | RETRIEVE MISPLACED CODES** command from the **PROJECT** menu. The program immediately browses through all documents and reports the number of

codes that have been retrieved.

If the retrieved codes are obsolete or no longer valid, simply erase the code in the codebook, which will result in the removal of all codings associated with it (see [Deleting Existing Codes](#)).

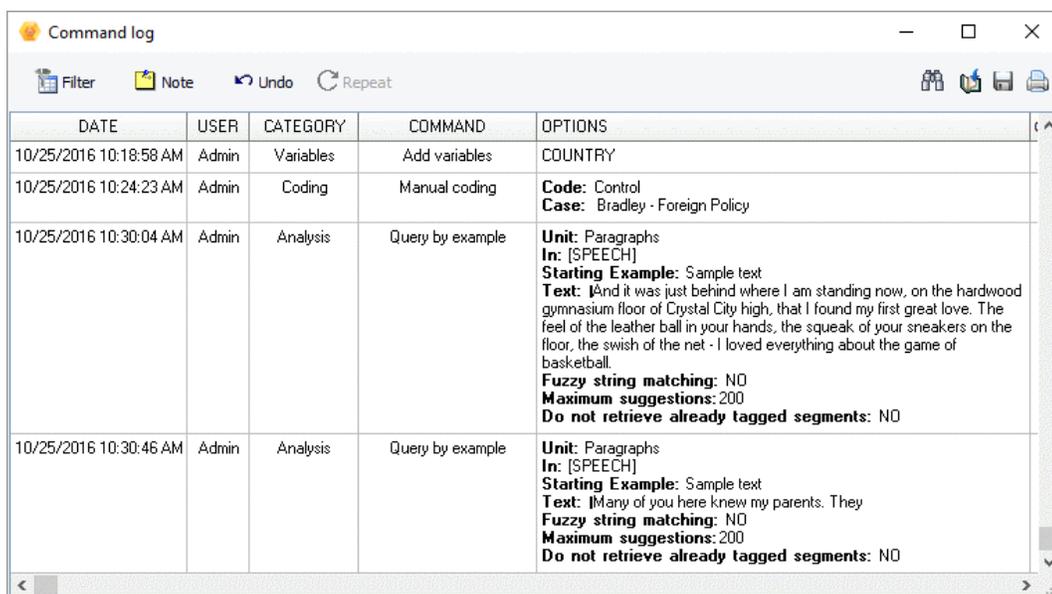
Using the Command Log

The **COMMAND LOG** function allows you to keep a trace of almost every project access and operation performed (codebook editing, case and variable transformation, analysis, etc.). Comments may also be added to specific log entries. Such a log may serve as part of an audit trail, and be used to repeat previously performed queries or analyses, or to reverse some operations (such as code moving, splitting of codes, autocoding).

The command entries stored in the log can be set by the administrator by adjusting the Command Log options in the Project Properties dialog box. Each entry includes the date and time the operation was performed, the name of the logged user, the broad category of the command, and the name and options of the command.

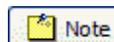
To access the log:

- Run the **COMMAND LOG** command from the **PROJECT** menu. A dialog box similar to this one will appear:



| DATE | USER | CATEGORY | COMMAND | OPTIONS |
|------------------------|-------|-----------|------------------|--|
| 10/25/2016 10:18:58 AM | Admin | Variables | Add variables | COUNTRY |
| 10/25/2016 10:24:23 AM | Admin | Coding | Manual coding | Code: Control Case: Bradley - Foreign Policy |
| 10/25/2016 10:30:04 AM | Admin | Analysis | Query by example | Unit: Paragraphs In: [SPEECH] Starting Example: Sample text Text: ¶And it was just behind where I am standing now, on the hardwood gymnasium floor of Crystal City high, that I found my first great love. The feel of the leather ball in your hands, the squeak of your sneakers on the floor, the swish of the net - I loved everything about the game of basketball. Fuzzy string matching: NO Maximum suggestions: 200 Do not retrieve already tagged segments: NO |
| 10/25/2016 10:30:46 AM | Admin | Analysis | Query by example | Unit: Paragraphs In: [SPEECH] Starting Example: Sample text Text: ¶Many of you here knew my parents. They Fuzzy string matching: NO Maximum suggestions: 200 Do not retrieve already tagged segments: NO |

Click the  button to select the information displayed in the table. A filtering panel will appear at the bottom of the toolbar with three list boxes that will allow you to select log entries associated with a specific **User**, a single **Category** of commands, or a specific **Command**. To disable any filtering condition, set it to **<all>**.

Clicking the  button toggles the display of an edit box at the bottom of the dialog box. This edit box may be used to enter a new comment or edit an existing one. To attach a comment to a specific log entry, simply move to this log entry and type the comment in the edit box at the bottom of the dialog box.

Some operations may also be reversed simply by clicking the  button. The following operations may be reversed (under some conditions):

- Manual assignment of a code (from the main screen or from any hit lists)
- Autocoding performed from any retrieval tools
- Manual recoding of a coded segment

- Search-and-replace codes
- Adding variables
- Renaming a variable
- Renaming a code or category
- Moving a code or category

Some logged commands may be executed again by selecting them and clicking the  button. When a command is executed this way, the original options are restored and the dialog box is displayed, allowing you to edit the original option before executing the command. The following operations may be recalled from the log entries:

- Analysis / Text Retrieval
- Analysis / Section Retrieval
- Analysis / Query by Example
- Analysis / Keyword Retrieval
- Analysis / Coding Frequency
- Analysis / Coding Retrieval
- Analysis / Coding Co-occurrences
- Analysis / Coding Sequences
- Analysis / Coding by Variables
- Analysis / Coding Agreement
- Analysis / Content Analysis
- Project / Export Statistics
- Project / Export Documents
- Cases / Filter
- Variables / Compute
- Codes / Consolidate Codes

To export the log table to disk:

- Click the  button. A Save File dialog box will appear.
- In the **Save as type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV), and Stata data file (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.
- Type a valid file name with the proper file extension.
- Click the **Save** button.

To print the log table:

- Click the  button.

Qualitative Coding Features

This chapter provides basic instructions on how to add, edit or delete codes in the codebook, how to manage the codebook and how to code documents.

Managing the Codebook

The main function of QDA Miner is to assign codes to selected text segments and then analyze these codes. Available codes associated with a project are located in the **CODES** window in the lower left corner of the application workspace. Codes are grouped into categories. The list of available codes, known as the codebook, is displayed as a tree structure, in which categories are the nodes under which associated codes can be found.

You can expand a category to view all associated codes or close it by clicking the plus or minus sign located to the left of the category name.

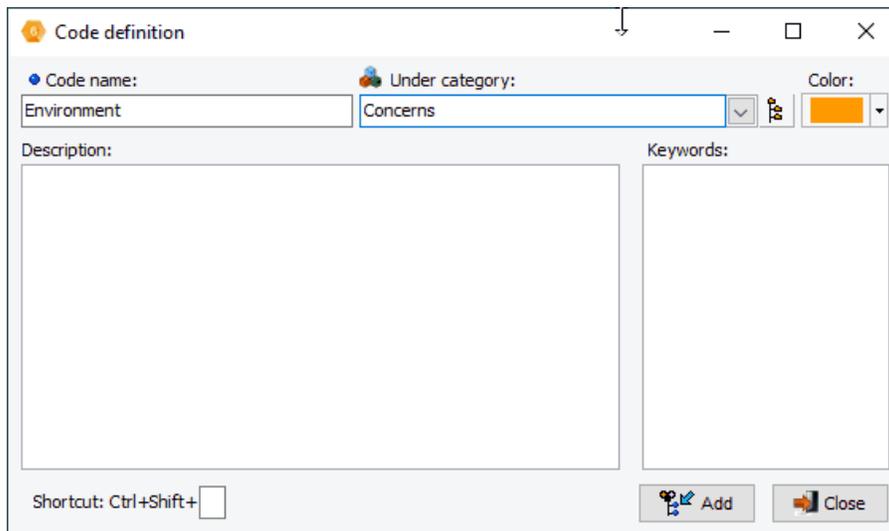
When a new project is created, this window is empty.

This section provides basic instructions on how to add new codes, organize them into categories and edit and delete existing codes. It also provides instructions on how to change the location of a code in the codebook, how to merge a code into another and how to import an entire codebook from another project.

Adding a Code

To add a new code to the existing codebook:

- Select the **ADD** command from the **CODES** menu. The following dialog box will appear:



When you create a new code, you must (i) specify a unique name and (ii) select a category.

The **Under** list box allows you to select the category under which this code will be stored. This control can be used both as an edit box to create a new category and as a list box from which you can select an existing category.

If you want to add the new code to an existing category, select the category name from the list of

available categories by clicking the down arrow key to the right of the list box and by selecting the category name.

To add the new code under a new category, simply enter the name of the new category. By default, the new category is listed at the top level of the codebook. To create a subcategory underneath another one, type its full path separating each level by a backslash. For example, typing `Topics\Economy` will create a subcategory Economy under the Topics main category. If this top-level category does not exist, the program will create both this category and its subcategory and then add the specified code into this subcategory. To store a new subcategory into an existing path, you may also type this new category name and then click the  button, which will display the tree view of the codebook categories. From that, select the parent category under which this new category will be stored. Selecting any existing category from this tree view automatically inserts the full path before the new category name in the edit box.

The maximum number of levels a codebook can contain is set to 4 by default for every new project. Since the last level can only contain codes, the actual maximum level of a subcategory is equal to this maximum minus 1. To increase or decrease the maximum number of levels allowed in a project codebook, run the **PROPERTIES** command from the **PROJECT** menu, and set the **Maximum Levels in the Codebook** option to a number between 2 and 8.

When a code is assigned to a text segment, a bracket appears in the margin of the document to indicate the beginning and end of the code along with the code name. The **Color** option can be used to select the color of this bracket and of its associated label.

The **Description** option allows you to enter a definition or a detailed description of the code. You can use this section to specify coding instructions for the coders, along with examples or non-examples, and related codes that may be used in place of or in conjunction with this code.

The **Keywords** section allows you to enter words, word patterns, or phrases that are characteristic of the code. QDA Miner may then search text for any of those items using the **KEYWORD RETRIEVAL** command and retrieve sentences, paragraphs or documents containing any of those items (see [Keyword Retrieval](#)). The following rules should be followed when entering keywords:

- Each item must be entered on a separate line.
- The underline character is used to join words of a phrase. Since space characters are not allowed in keyword entries, they are automatically transformed into underline characters.
- Wildcards such as * and ? are supported. For example, the following entry REPORT* will match words like REPORT, REPORTS, REPORTERS, while the word pattern EXP?RT will match both EXPERT and EXPORT.

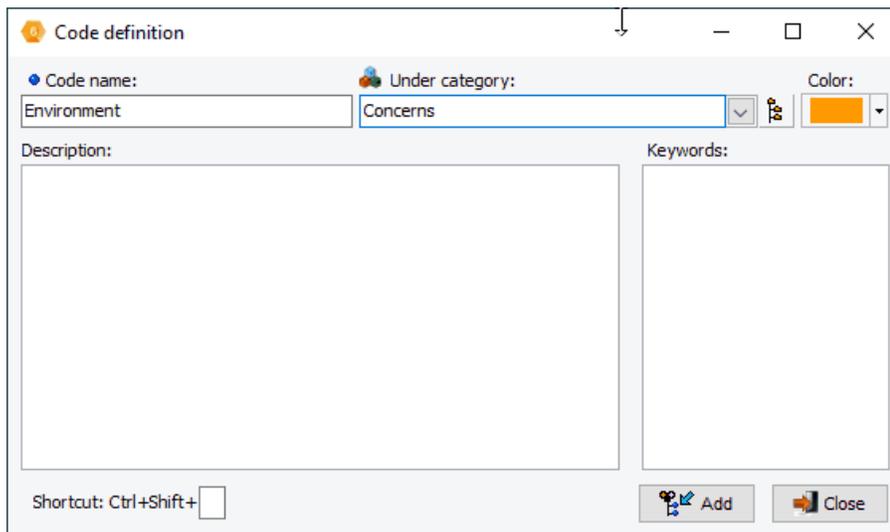
The **Shortcut** option at the bottom of the dialog box allows you to assign a keyboard shortcut to a code. This shortcut can be used to quickly assign code to whole paragraphs in the main editor without the need to highlight the paragraph and select the desired code in the codebook. To assign a shortcut, move to the shortcut edit box and type either a letter or a numeric character. If the typed character has already been assigned to another code, an error message will indicate which code has already received this shortcut assignment.

To use the shortcut, move the editing cursor in the main editor until it is located in the paragraph you want to code. Then press and hold down the **Ctrl** and the **Shift** keys along with the character that has been assigned to the code. The same key combination can also be used in hit tables produced by the various retrieval functions of QDA Miner to code text associated with a specific hit.

Modifying Codes

To modify an existing code or category:

- Select the code or the category that you want to edit.
- Select the **EDIT** command from the **CODES** menu. If the currently selected item is a category, you will be prompted to provide a new name for this category. If a code is selected, the **CODE DEFINITION** window will appear.



- Change the code name, its category, its description, its keywords or the color used to identify segments that has been assigned to this code as desired.
- Once finished, click **OK** to apply the changes.

Changing the name of a code will trigger QDA Miner to browse all documents in the active project in order to apply this change.

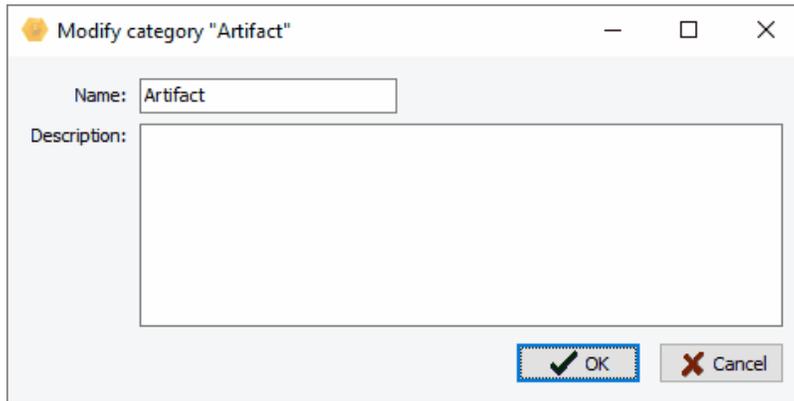
This dialog box may also be used to assign a shortcut to the code or modify the existing shortcut.

Editing Categories

You may sometimes find it necessary to edit categories in the codebook. The **EDIT CODE** function allows you to change the name of an existing category as well as add or edit its description.

To edit a category:

- From the codebook, select the category that you wish to edit.
- Select the **EDIT CODE** function from the **CODES** menu or right click and select **EDIT CODE** from the menu. A dialog box similar to the one below will appear.



- Type the new category name in the **Name** field.
- Add or edit the description in the **Description** field if you desire.
- Click **OK** to save changes.

Deleting Existing Codes

To delete an existing code, simply select the code that you want to delete and then select the **DELETE** command from the **CODES** menu. You can also delete all codes associated with a category by selecting this category instead of a code. If you attempt to delete a category, you will be prompted to confirm the deletion of all codes within this category.

Deleting one or more codes from the codebook results in the removal of the corresponding codes from all documents associated with the current project. If you want to delete an existing code but assign another code to all segments currently associated with this code, use the code-merging feature (see [Merging Codes](#)).

Moving Codes

Codes and categories may be freely moved in the codebook using one of the following methods:

To move a code using drag & drop:

- Click the code that you want to move, hold down your mouse button.
- Drag the code to its new location and release the mouse button. The dragged item is inserted in the target position depending on the exact position where you drop it. If the item is dropped on a category name, it will be stored as the last item under this category. Dropping a code over another code name inserts the dropped item before the target code.

To move a code to another category:

- Select the code that you want to move, then select the **EDIT** command from the **CODES** menu.
- In the **Under** list box, select the category name under which you want to move this code by clicking the down arrow key to the right of the list box and selecting the category name.
- Click the **OK** button to confirm this move.

To move a category and its items using drag & drop:

- Click the category that you want to move, hold down your mouse button.
- Drag the category to its new location and release the mouse button. If the item is dropped on another category name, it will be inserted before the target category. If it is dropped over a code, the item will become a subcategory of this code category.

QDA Miner will not allow a category to be dropped in a location underneath it. It will also forbid dropping a category at a location if the number of levels resulting from such a move exceeds the highest level allowed for this project codebook.

To increase or decrease the maximum number of levels allowed in a project codebook, run the **PROPERTIES** command from the **PROJECT** menu, and set the **Maximum Levels in the Codebook** option to a number between 2 and 8.

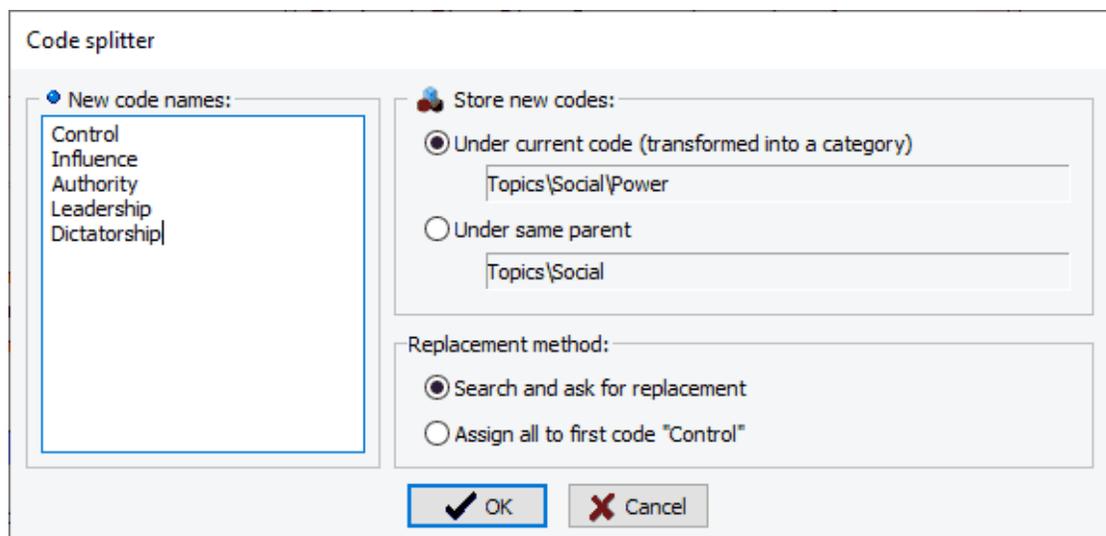
Splitting a Code

Sometimes, you may feel the need to refine a code that has been created at an early stage of analysis in order to make an important distinction you didn't initially consider or to introduce nuance that would allow for a finer-grained analysis. Frequency analysis of codings may also reveal that a code definition is too broad and occurs too often to be of any value for the interpretation of the data. The splitting code function of QDA Miner can be used to solve this. It allows you to subcategorize a code into several other codes in a single step that involves:

1. The transformation of the initial code into a category.
2. The creation of the codes underneath this category.
3. The assignment of all existing text segments associated with the initial code to either one of these new codes.

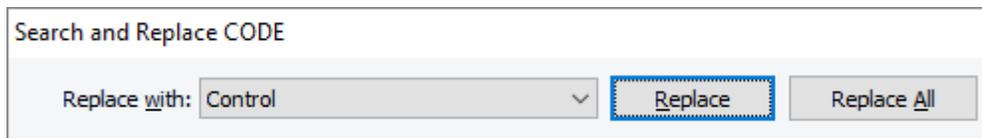
To split a code into several codes:

- In the **CODES** window, select the code you want to split.
- Select the **SPLIT CODE** command from the **CODES** menu. A dialog box similar to the one below will appear:



- In the **New Code Names** edit box, enter the names of all the new codes into which the initial code will be recoded, one code name per line.
- In the **Store New Codes** section of the dialog box, specify where the new codes will be stored. By default, the initial code is transformed into a category, and the new codes are stored under this newly created category. This can be achieved by selecting the **Under Current Code** radio button. You may instead wish to store all new codes in the same location as the initial code by selecting the **Under Same Parent** radio button. Please note that when the code to be split is at the deepest level allowed by the project setting, only this second option will be allowed. In that case, to make sure all new items will be grouped under a new category, you can either move the code to a higher level of the hierarchy prior to the execution of this split command (see [Moving Codes](#)), or increase the maximum number of levels allowed in this project codebook.
- Select which replacement method will be used to replace all coded segments currently tagged with the initial code. Two options are available: (1) The program can search among all documents for any coded segment with the split code, display it and, for each coded segment that is found, ask the user to choose among all the new codes the one that should be attached to this segment; or (2) Choose to immediately replace all coded segments with the first code specified in the list of new codes. The user may return later to the coded segments associated with this first code in order to review them and, if needed, modify the code associated with the segments.
- Click **OK** to split the code.

If the **Search and Ask for Replacement** option was selected, the program will search among all documents and all cases for text segments that have been tagged with the initial code that has just been split. It will stop at the first occurrence, highlight the text segment, and display a dialog box similar to the one below.



In the **Replace With** list box, select the code that is appropriate to this text segment and click the **Replace** button. The program will then search for the next occurrence and stop again, allowing you to select another code and assign it to this other text segment. The program proceeds this way until all text segments associated with the initial code have been assigned a new code. However, you may choose to stop this interactive search-and-replace procedure by choosing a code and clicking the **Replace All** button, instructing the program to replace the initial code for all remaining text segments with a new code. The user may then return later to the coded segments associated with this code to review those and, if needed, modify the code associated with those segments, either individually by selecting their code marks and using the **RECODE TO** command, or globally using the **SEARCH & REPLACE** command from the **CODE** menu (see [Searching and Replacing Codes](#)).

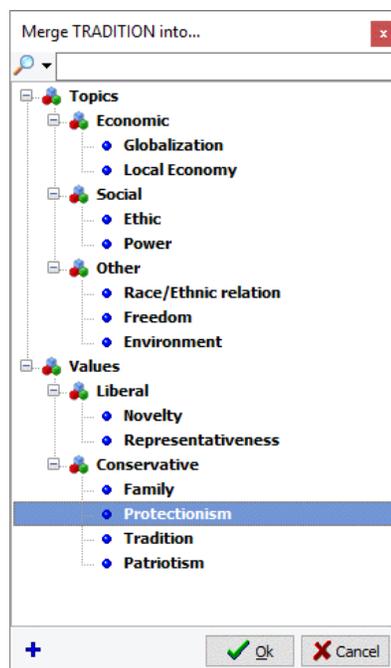
Merging Codes

During the analysis process, you may choose to merge several codes together. QDA Miner offers you the possibility of merging a single code into another or of merging all codes in a single category into one code. When merging one code into another, QDA Miner removes the first code from the codebook and automatically recodes all text segments tagged with the first code by giving them the new code.

For example, if you decide to merge the code **Family** into **Tradition**, QDA Miner will delete **Family** from the codebook. It will then search for all documents in the project for text segments that have been tagged with the **Family** code and change the assigned code to **Tradition**. When merging all codes of one category, the program removes all the codes, transforms the category into a new code, and then automatically recodes all text segments tagged with any of the deleted codes with the new code. If a segment has been tagged using two or more of the merged codes or when two of the coded segments overlap each other, the coded segments are automatically consolidated so that only one tag is attached to the text segments.

To merge one code into another:

- In the **CODES** window, select the code you want to eliminate.
- Select the **MERGE CODE** command from the **CODES** menu. The following dialog box will appear:



- Select the code you want to attach to the text segments that are already assigned to the code you have decided to delete.
- Click the **OK** button to proceed.

To merge all codes in a category:

- In the **CODES** window, select the category containing the codes you would like to merge together.
- Select the **MERGE CODES** command from the **CODES** menu.

- The program will ask you to confirm the merging of all the codes into this category. Click **Yes** to confirm the merge.

Creating Virtual Grouping of Codes

Codebook categories are used mainly to organize codes in a hierarchical way. By default, categories cannot be assigned to text segments and frequency statistics can only be computed on codes, not on their categories. This restriction has been implemented to maintain the independence of observations required by some routines available in QDA Miner, like clustering or multidimensional scaling. However, you may sometimes wish to obtain descriptive statistics at a category level. While you could transform codes within a category into a single code by merging all codes underneath this category (using the **CODES | MERGE** command), such a solution results in a permanent loss of information since all coding made using those codes are replaced with a single code. The **VIRTUAL GROUPING** function allows you to temporarily group all codes in a category and instruct QDA Miner to compute frequencies and obtain statistics at the category level without reporting statistics on codes underneath it. For example, if a category named **POSITIVE** contains five codes, by default, the **CODING FREQUENCIES** command will report statistics on each of those. If you virtually group codes in this category, the same command will no longer display statistics to each code, but only a single line of statistics for the **POSITIVE** category. Export coding statistics will also result in a single variable containing frequency data for the whole category.

The **VIRTUAL MERGE** function will affect the following features of QDA Miner:

- ANALYSIS | CODING FREQUENCIES
- ANALYSIS | CODING CO-OCCURRENCES
- ANALYSIS | CODING SEQUENCES
- ANALYSIS | CODING BY VARIABLES
- ANALYSIS | CODING AGREEMENT
- VARIABLES | COMPUTE COMMAND
- FILE | EXPORT | STATISTICS

The presence of virtual groupings will not affect the text or coding retrieval features, as well as any coding or other codebook management procedures.

To virtually group codes into their parent category:

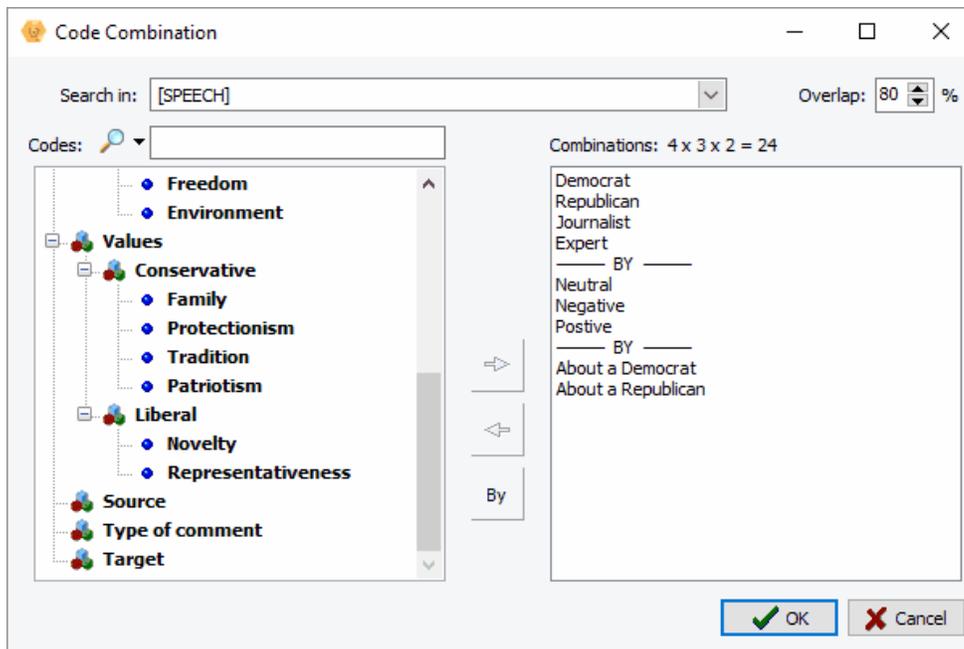
- In the codebook, highlight the category on which you would like to obtain statistics.
- Run the **CODES | VIRTUAL GROUPING** command. The category icon will be transformed into a  icon while icons of all codes underneath it will be replaced with a  icon.

To ungroup codes in a virtually grouped category:

- In the codebook, highlight the category you would like to ungroup.
- Run the **CODES | VIRTUAL GROUPING** command. The original icons of the highlight category and codes will be restored, indicating that they are no longer grouped.

Combining Codes

Quite often, a codebook will be multidimensional with several aspects of a phenomenon being coded independently. For example, if you are analyzing communication processes, you may code the source of a comment (the speaker), its target or the specific topic discussed as well as the tone of the message (positive, negative or neutral). In such situations, the main interest lies not in the appearance of a specific code but in the combination of codes from those different dimensions. QDA Miner offers various tools to analyze code co-occurrences and code sequences or to retrieve codes overlapping or close to each other. The **CODES | COMBINE** command allows you to join codes from multiple dimensions and create new compound codes that combine all those dimensions. The coding is performed using a dialog box similar to the one below:



- The left side of the dialog box first shows all current codes in your codebook. To combine, you select codes associated with the first dimension and then click the **➔** button to move them to the right panel.
- You then click the **By** button to separate codes that belong to the second dimension and continue until all codes from all the various dimensions have been added. In the example above, codes from three different dimensions were used. The number of compound codes that will be created will be equal to the product of the number of codes in each dimension. In the above example, we combine four source codes by three tones by two target codes to produce a total of 24 new compound codes (4 x 3 x 2). Those new codes will be created and stored in a separate category and will be named by linking the name of their component codes.
- In order to be combined in such a way, codes should overlap. The amount of overlap that is used as the criteria for deciding whether they co-occur can be adjusted by setting the **Overlap** option. The **Search In** option can also be used to restrict the combination to specific document variables.
- Clicking the **OK** button will add all the compound codes to the codebook and then apply those codes every time every one of their component codes overlap each other.

Importing a Codebook

Quite often codebooks developed for a specific project may be used again for other coding purposes. QDA Miner can import a codebook and merge its codes and categories into the existing codebook. When merging codebooks, codes or categories whose names already exist in the current codebook are simply ignored.

WordStat categorization dictionaries may also be imported and transformed into the codebook. When importing a content analysis dictionary, low-level categories are automatically transformed into codes and their items are imported as keywords. Higher-level categories containing other content categories are transformed into new categories.

For example, the importation of the following WordStat dictionary:



will create two codes, NORTH-AMERICA and SOUTH-AMERICA, under the ORIGIN category:



Items stored under the two codes will automatically be imported as keywords.

To import an existing codebook or a WordStat dictionary:

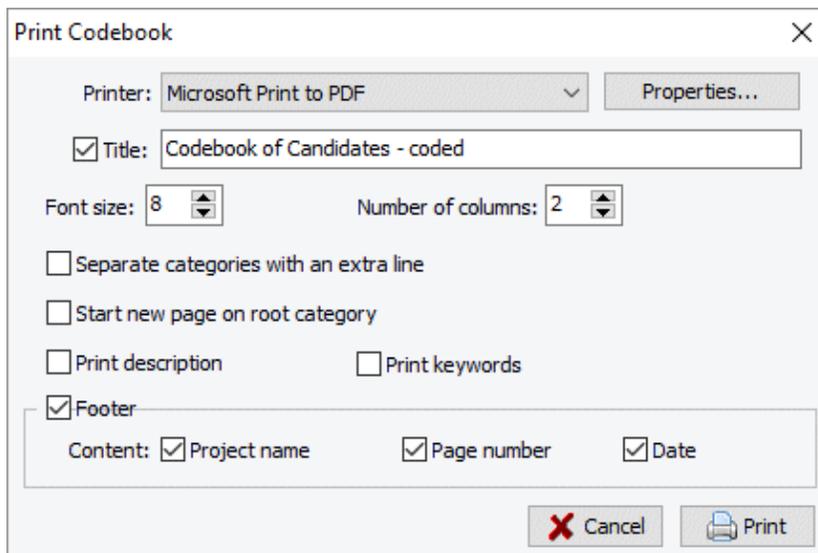
- Select the **IMPORT** command from the **CODES** menu. A **File** dialog box will appear.
- Select the .WPJ project file containing the codebook that you want to import or the .CAT file containing the categorization dictionary you want to transform.
- Click the **Open** button.
- You will be asked to confirm the merging of imported codes into the current codebook. Click **Yes** to confirm.

To merge codebooks as well as coded segments stored in another project, see [Merging Projects](#).

Printing the Codebook

To create a printed version of the codebook:

- Select the **PRINT CODEBOOK** command from the **CODES** menu. A **Print codebook** dialog box like the one below will appear, allowing you to set various options of what and how the codebook should be printed.



Printer: Select the desired printer. To adjust the printer settings, such as the page size and orientation or printer resolution, click the **Properties** button.

Title: Use this option to specify a particular line of text that will appear at the top of each page.

Font size: This option is to adjust the font size used to print the dictionary items.

Number of columns: The codebook may be printed with up to seven columns per page, allowing you to print large codebooks on fewer pages. Please note that when increasing the number of columns per page, it may be necessary to decrease the font size to prevent the overlapping of items in adjacent columns.

Separate categories with an extra line: Setting this option skips a line every time a category name is encountered, allowing it to clearly delineate groups of codes belonging to the same category.

Start new page on root category: Root categories are the codebook categories still visible when the codebook is fully collapsed. Selecting this option instructs the program to start the printing of all items starting with each root category at the top of a new page.

Footer: Enable this option to print a footer at the bottom of each page. A footer can consist of up to three items: The **Project Name** (printed on the left margin of the footer), the **Page Number** (located at the bottom center of the page) and the **Date** (printed on the right margin of the footer).

Print description: Select this option to print not only the code names, but also their descriptions. The description is printed in italics just below the code name.

Print keywords: This option prints the keywords and key phrases associated with each code.

Coding Documents and Images

The simplest and most obvious method of qualitatively code textual information is to read each document in a project and manually assign existing codes in a codebook to a selected segment of text. QDA Miner allows you to easily attach a code to a block of text that may be as small as a single character but that will more often consist of a few words, or one or more sentences or paragraphs. A code may even be assigned to an entire document.

The following section provides instructions on how to assign codes to text segments, resize the selected segment, change the associated code, attach a comment to a coded segments, as well as how to delete one or more codings.

Assigning Codes to Text Segments

To assign a single code to a segment of text:

You can use several methods to assign codes to text segments.

Method 1 - Quick assignments of codes to whole paragraphs

- Select the code from the code list (bottom left of the screen) by clicking it and holding the mouse button down.
- While holding the mouse button down, drag the mouse cursor over the paragraph you want to code.
- Release the mouse button to assign the dragged code to the paragraph found under the mouse cursor.

Method 2 - Highlight text and double-click the code

- Highlight the text segment that you want to code.
- Double-click the code in the code list.

Method 3 - Highlight text and drop the code

- Highlight the text segment that you want to code.
- Drag an item from the code list to the selected segment.

Method 4 - Using the code list tool button.

- Select the proper code from the list box located in the toolbar above the document.
- Highlight the text that you want to code.
- Click the  button.

The last code used can be quickly assigned to a newly selected text segment by right-clicking in the document and selecting the **CODE AS** command from the shortcut menu.

To assign several codes to the same segment:

If you hold the **Ctrl** key down while assigning a code to a text segment, the text segment will remain highlighted. You can then assign other codes to the same segment by double-clicking them in the code

list or by dragging them from the code list to the highlighted segment.

Assigning Codes to a Graphic Region

Assigning a Single Code to a Graphic Area

You can use several methods to assign codes to a graphic area.

Method 1 - Select the area and double-click the code

- Select the area of the graphic you want to code.
- Double-click the code in the code list.

Method 2 - Select the area and drop the code

- Select the graphic area that you want to code.
- Drag an item from the code list into the selected area.

Method 3 - Using the toolbar.

- Select the proper code from the list box located in the toolbar above the image.
- Select the area that you want to code.
- Click the  toolbar button.

Assigning Several Codes to the Same Area

If you hold the **Ctrl** key down while assigning a code to a graphic area, the selection will remain active. You can then assign other codes to the same area by double-clicking them in the code list or by dragging them from the code list to the selected region.

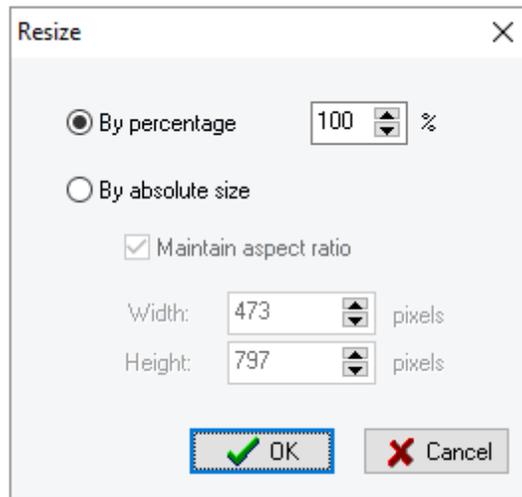
Rotating Images

You can rotate an image 90° left, 90° right and 180° by clicking on the  button and choosing the appropriate rotation from the drop-down list. The codings are automatically adjusted to the new orientation. This function can be useful when working with satellite maps.

Resizing Image

Digital cameras take high-resolution photos resulting in huge image files, which can create huge project files upon importation. The resize image option allows you to reduce the size of the image, which intern can reduce the file size.

- Clicking the  button calls a **Resize** dialog box.



This dialog box gives you the option of increasing or decreasing your image by percentage or absolute size.

To resize by percentage:

- Select the **By percentage** option.
- Click on the **Up** or **Down** arrow until the desired percentage is reached or type the desired percentage directly in the box.
- Click **OK** to confirm the resizing. Existing codings are automatically adjusted to the new image size.

To resize by absolute size:

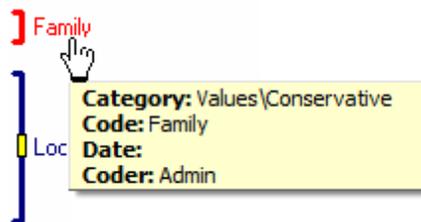
- Select the **By absolute size** option.
 - Enter the number of pixels desired for the width and the height of the image by typing the number in the box or using the **Up** and **Down** arrow buttons.
 - If you wish to **maintain the aspect ratio** select the checkbox.
 - Click **OK** to confirm the resizing. Existing codings are automatically adjusted to the new image size.

Working with Code Marks

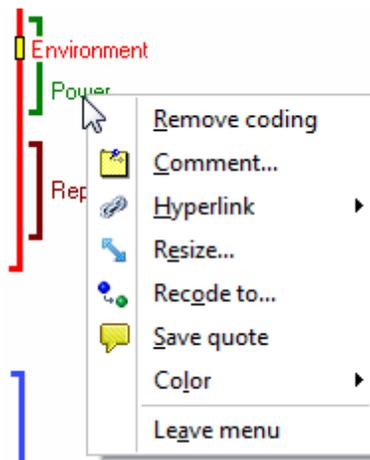
To the right of the document or image window is a margin area. This area is used to display codes assigned to text segments or graphic areas. When viewing images, a second margin is shown at the bottom of the window displaying the horizontal locations of the codes. Code marks look like the following:



Color brackets are used to indicate the physical limits of coded segments. Moving the mouse cursor over a code mark (either the bracket or the code label) will display more detailed information about this specific coded segment such as the category to which it belongs, its creation date, the name of the coder who created it, and any comment assigned to this coded segment.



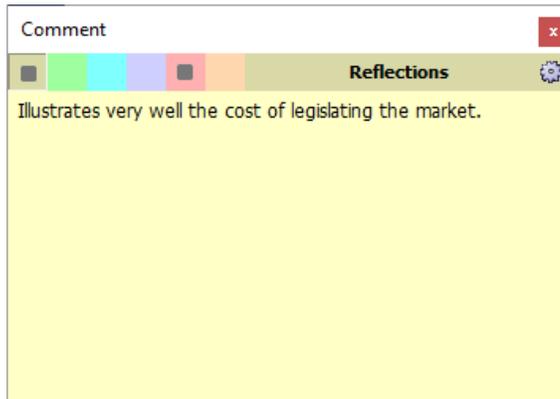
Clicking a code mark selects the text segment to which this code has been assigned. Clicking the same code mark a second time opens a shortcut menu. This menu can also be accessed by moving over a code mark and right-clicking it.



Attaching a Comment to a Coded Segment

To attach a comment to a coded segment:

- Select the coded segment to which you want to attach a comment by clicking its code mark.
- Click a second time to display the shortcut menu.
- Select the **COMMENT** command. A small window like the one below will appear:



- Select the comment type you want to add by clicking its corresponding color.
- Enter the text that you want to associate with the selected coded segment.
- Click the **X** button (in the upper-right corner) to save the comment and to close the window.

You can assign up to six types of comments to a single coding by clicking one of the color tab in the upper-left corner of the dialog box (each color corresponds to a different comment type). The labels associated with those comment types appear on the right of those tabs and may be customized by clicking the  button.

When a note has been assigned to a coded segment, a small square in a color corresponding to the first comment is displayed in the middle of the code bracket. To edit an existing code, follow the same steps described above. To remove a comment, simply open the Note Editor and delete all text in the editing window.

To retrieve a list of all comments in a project file see [Retrieving a List of Comments](#).

Removing Code Assignments

To remove coded assignments:

Two methods may be used to remove codes assigned to text segments.

Method 1 - Using the coded segment panel

- Select the coded segment that you want to delete by clicking its code mark.
- Click this mark a second time or right-click to display a shortcut menu.
- Select the **REMOVE CODING** command.

Method 2 - Using the code deletion dialog box

The **Code Deletion** dialog box allows you to delete one or more codes in the currently selected document or image.

- Click the  button located on the toolbar of the document window. A list of all codes assigned to the current document or image will appear.
- Select the names of all the codes that you want to remove.
- Click the **OK** button.

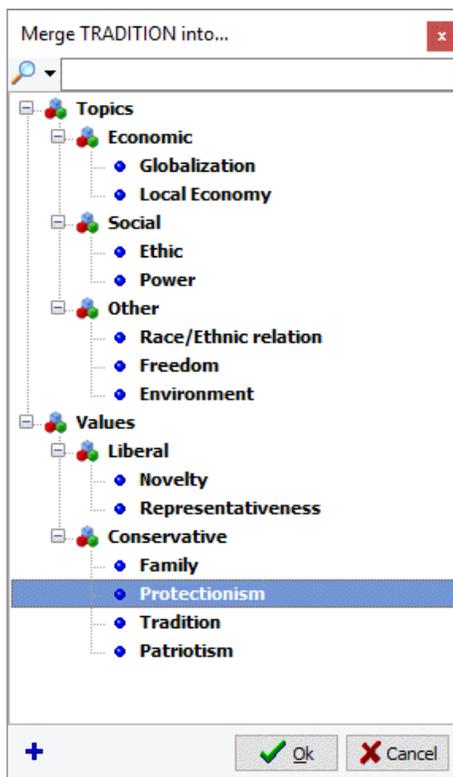
Note: The above operations are only used to remove code assigned to text segments or image areas. They do not result in the removal of the code from the codebook. To remove a code along with all associated assignments, see [Deleting Existing Codes](#).

To remove all code assignments in a project see [Clearing All Code Assignments](#).

Changing the Code Associated with a Segment

To change the code associated with a text segment:

- Select the coded segment that you want to recode by clicking its code mark.
- Click a second time to display the shortcut menu.
- Select the **RECODE TO** command. A window containing all available codes will be displayed.

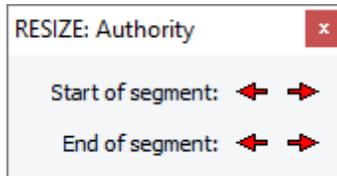


- To change the code currently assigned to a new one, select the new code by clicking it, followed by the **OK** button. You can also double-click the desired code.

Resizing Coded Segments

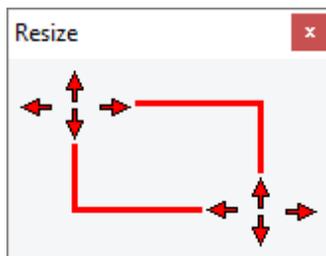
To resize a coded segment:

- Select the coded segment that you want to resize by clicking its code mark.
- Click a second time to display the shortcut menu.
- Select the **RESIZE** command.
- For document variables, a small window like the one below will appear.



From this dialog box, you can move the starting or ending location of the selected segment by clicking the corresponding arrow button. Clicking a \leftarrow button moves the chosen limit of the segment back to the left and up while clicking a \rightarrow button moves this limit forward to the right and down.

- For image variables, the resizing dialog box will look like this:



From this dialog box, you can move the upper-left and lower-right coordinates of the selected area by clicking the corresponding arrow button. You can repeat the same move several times by clicking and holding the mouse button down. Release the mouse button when you are done.

Hiding Code Marks

Sometimes, you would rather focus on, or examine, specific coding or assigned codes. In such a situation, it may be preferable to hide unrelated code marks in the document margin.

To hide code marks associated with a specific code:

- In the codebook list, select the code for which the associated code marks will be hidden.
- Select the **HIDE CODE MARKS** command from the **CODES** menu.

Codes for which associated code marks have been hidden are displayed in the codebook using a lighter font and a grey bullet.

To hide code marks associated with a category of codes:

- In the codebook list, select the category containing all the codes for which the associated code

marks will be hidden.

- Select the **HIDE CODE MARKS** command from the **CODES** menu.

To reveal hidden code marks:

- In the codebook list, select the code or the category for which the previously hidden code marks will be displayed.
- Select the **HIDE CODE MARKS** command from the **CODES** menu which will remove the check mark and will reveal all associated code marks.

Please note that hiding code marks only affects the display of those marks in the document or image margin. It has no effect whatsoever on the analysis or retrieval of coded segments.

Highlighting or Hiding Coded Segments

Hiding or highlighting segments in coded text

Sometimes you may find it useful to hide or dim coded text in order to clearly focus on the portions of text that have not yet been coded. Alternatively, you may also wish to highlight text segments associated with specific codes. The **CODED TEXT** item from the **DOCUMENT** menu allows you to hide, mask, dim, or highlight coded text segments. The following display properties are available:

- **NORMAL** (default, black text on white background)
- **HIGHLIGHT** (yellow background)
- **DIM TEXT** (gray text on white background)
- **HIDE TEXT** (white text on white background)
- **MASK TEXT** (black text on black background)
- **CODE COLORS** (the code color is used as the background color)

Please note that when choosing **CODE COLORS** as the highlighting mode and when more than one code has been assigned to the same text segment, only one background color is used.

The highlighting or hiding of coded segments is applied to all coded segments in which code marks are displayed. you may thus change display properties of text segments associated with specific codes by using the **HIDE CODE MARKS** command to hide code marks for all other codes (see [Hiding Code Marks](#)).

Hiding or highlighting areas in coded images

Just like the highlighting feature for coded text, it is also possible to dim, mark or highlight specific regions of a coded image associated with specific codes.

To customize the highlighting function:

- Click the **Down arrow** on the  button and select **SETTINGS**. The following dialog box will appear:

The first group of options, **Highlighting effects**, allows you to select what highlighting effects to apply, while the second group of options below it let you adjust how coded areas will be framed. The following options are available:

Type: This set of options allows you to choose whether the selected regions will be made **Lighter** or **Darker** as well as the intensity of this change using the sliding cursor. It also allows you to choose whether only the **Brightness** will be affected or whether the highlighted region should also be transformed into **Grayscale**. Selecting **No effect** will disable those settings. However, such a setting will not affect how coded areas will be framed (see below).

Location: This option lets you choose whether the highlighting effect should be applied inside the coded areas or outside it.

The **Framing** option box offers various options to control how frames around coded regions will be drawn.

Type: This option offers four different choices:

- | | |
|---------------------|--|
| No Frame | Prevents frames from being displayed around coded regions. |
| Frame | Frames will be drawn around each coded region. |
| Contour | Frames will be drawn only at the outer edges of all coded areas. If two or more areas are overlapping, lines crossing other coded areas will not be drawn even if their associated codes differ. |
| Code Contour | Frames will be drawn at the edges of overlapping areas as long as they are associated with the same code. If two or more of these areas are overlapping, lines crossing those coded areas will not be drawn. |

Size: This option allows you to change the frame lines width.

Color: The color option allows you to choose the color for frame lines. If **Code Color** is selected, the color of frames around areas will be set to the color associated with the code. you may also choose a **Single Color**. A list box allows you to select any available color.

Modifying Code Mark Color Scheme

The color scheme used to display code marks is set by default to highlight different codes. It may, however, be changed to emphasize the different coders who have assigned codes to the text segments.

To change the coding scheme to highlight different coders:

- Select the **CODE MARKS COLOR** command from the **CODES** menu.
- Choose the **BY CODER** menu item.

To change the coding scheme to highlight codes:

- Select the **CODE MARKS COLOR** command from the **CODES** menu.
- Choose the **BY CODE** menu item.

To modify colors associated with different codes, see [Modifying Codes](#). For instructions on how to assign different colors to different coders, see [Security and Multi-Users Settings](#).

Searching and Replacing Codes

The **SEARCH & REPLACE** command may be used to interactively review codes assigned to text segments or image areas and, if needed, replace them with another code.

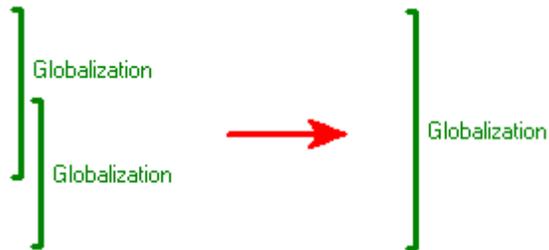
- Select the **SEARCH & REPLACE** command from the **CODES**. A dialog box similar to the one below will appear:



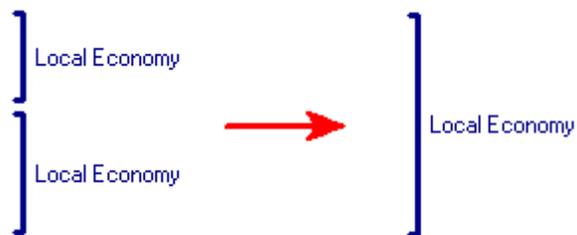
- The **Search in** option allows you to specify which document or image variables to search. If the current project contains more than one document or image variable, you will have a choice of selecting either one or a combination of them. By default, all codable variables are selected. To restrict the analysis to only a few of them, click the down arrow key at the right of the list box. You will be presented with a list of all available codable variables. Select the variables on which you want the search to be performed.
- The **Find Code** option allows you to choose which code you want to find. In the **Replace with** list box, select the replacement code.
- To replace all instances of the code at once, click **Replace All**. Or, to replace one instance at a time, click **Find Next**, and then click **Replace**.

Consolidating Coded Segments

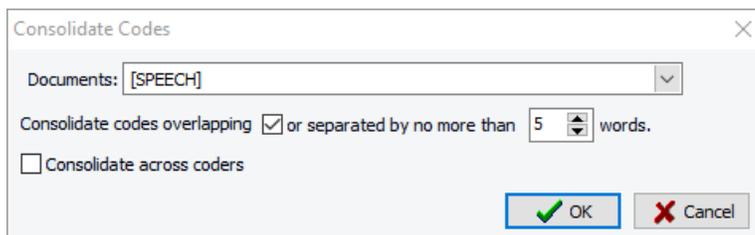
When performing extensive manual coding, autocoding and merging of codes, you may end up with some identical codes assigned more than once to the exact same text segment or to partially overlapping text segments. The **CONSOLIDATE** command allows you to replace codes assigned by the same coder to overlapping text segments by a single coded segment (see below).



This feature may also be used to join successive text segments sharing the same code and separated by less than a specified distance into a single, larger coded segment, like in the example below.



- To consolidate overlapping or adjacent codes, run the **CONSOLIDATE | MANUAL** command from the **CODES** menu. The following dialog box will appear.



- The **Document** option allows you to specify on which document variables the consolidation will be performed. If the current project contains more than one document variable, you will have a choice of selecting either one or a combination of them. By default, the currently displayed document variable is selected. To add other document variables, click the down arrow key at the right of the list box. You will be presented with a list of all available document variables. Select the variables on which you want the consolidation to be performed.
- You may choose to consolidate overlapping coded segments only or also merge coded segments that are near each other without overlapping. To consolidate such adjacent coded segments, select this option by putting a check mark in the check box and specify the maximum number of words that can appear between the two segments. Setting this value to zero will only merge codes that appear next to each other, without any text between them. Setting this option to 5 will merge codes immediately next to each other or those that are separated by no more than five words.

By default, the consolidation of codes is performed only for codings made by the same user. With version 3.1, however, the project administrator has the additional capability of consolidating codes across coders. Such a feature is especially useful in a situation where some documents have

been coded by more than one user to establish inter-rater reliability and when you need to calculate code statistics without counting the same code twice.

- To proceed with the code consolidation, click the **OK** button. To leave the dialog box without modification to existing coded segments, click the **Cancel** button.

Please note that code consolidation cannot be undone. If you are not entirely sure as to the overall effect of code consolidation, you should make a backup copy of your project before attempting this operation.

Hyperlinking

Hyperlinking allows you to attach to a specific text segment or coded segment a link to another part of the project or to some external resources. For example, you may use such a feature to link an example illustrating a fact or an idea to other examples corroborating or contradicting this first example, or to recreate a sequence of events over time by connecting successive events. The QDA Miner hyperlink feature may also be used to associate a coded segment to a specific geographic location or a specific time, allowing you to locate an event both in space and time.

Six types of hyperlinks are available in QDA Miner, allowing you to associate a piece of information with:

- 1) a web page;
- 2) a file on your computer system or available on your network;
- 3) a geographic location (with optional time information);
- 4) a time tag or time range;
- 5) another case;
- 6) a text or a coded segment.

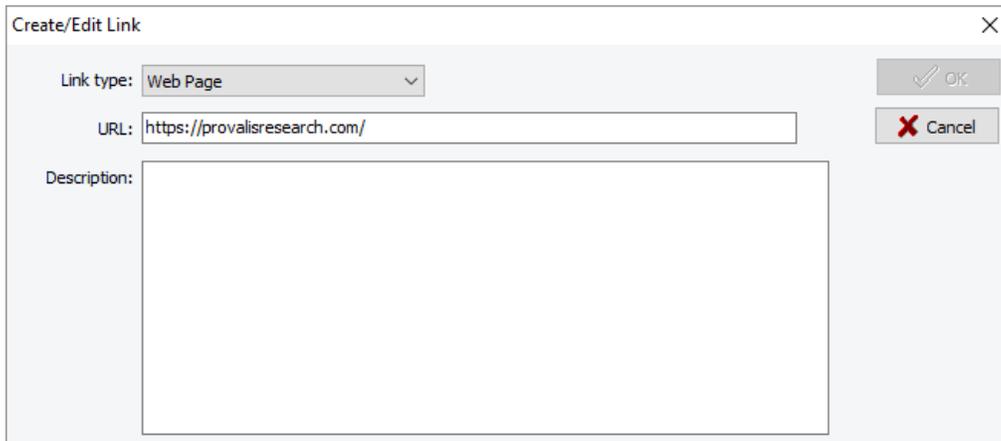
To add a hyperlink to a text segment (document variables only):

- Select the text to which you want to attach a hyperlink.
- Right-click to display the shortcut menu and select the **ADD** command from the **HYPERLINK** menu item.

Note: Because of the way hyperlinks are stored in the document, they cannot include the start or the end of a coded segment. For this reason, when such a text segment is selected, the command to create a hyperlink is disabled. An alternative solution is to attach the hyperlink to a code rather than to the text itself.

To add a hyperlink to a coded segment (document and image variables):

- Select the coded segment to which you want to attach a link by clicking its code mark.
- Click a second time to display the shortcut menu.
- Select the **CREATE** command from the **HYPERLINK** menu item. A dialog box like this one will appear:



The screenshot shows a dialog box titled "Create/Edit Link" with a close button (X) in the top right corner. Inside the dialog, there is a "Link type" dropdown menu currently set to "Web Page". Below it is a "URL" text field containing the text "https://provalisresearch.com/". At the bottom of the dialog is a large, empty "Description" text area. On the right side of the dialog, there are two buttons: "OK" with a checkmark icon and "Cancel" with a red X icon.

The **Link Type** list box allows you to specify which type of link to create. While the available options in this dialog box may differ depending on the selected link type, all link types share a common option that allows you to enter a **Description**. This edit box can retain the reasons why such a link was created, specify the nature of the relationship between the source and the target items, or add any comment. You may also type in some keywords that may later be searched for using the [Link Retrieval](#) feature.

The following section describes the specific options and data requirements associated with the different types of links. Geographic links will be discussed in a separate section.

Web Page

URL: This option lets you specify the URL of the web page you would like to associate with the selected item. In order to be recognized as a web link, the `http://` or `https://` prefixes should be included. The most convenient way to write a web URL is by opening the desired web page, copying the address from the URL box that appears at the top of the browser, and pasting it into the URL edit box.

External File

File: This option lets you type in a file name you would like to have associated with the selected item. This file may be a document, an image, a video or any other type of file, including executable applications. Clicking the  button allows you to browse through your computer to locate the desired file. Once the file is selected, its full path appears in the edit box. The **OK** button used to confirm the creation of the hyperlink will only be enabled if the typed file name points to an existing file.

Geographic Location

See [Geo-Tagging Documents and Images](#)

Time Stamp or Range

This type of link may be used to attach a specific time tag or time interval to the selected text or coded segment, allowing you to later perform coding retrieval based on dates or create timelines representing a sequence of events over time. The **Label** option may be used to store a single-line description of this event. The **Date** option is used to specify the basic date and time information. To specify a time range rather than a single time point, check the **To** box and then set the ending date and time.

An **Icon** may also be associated with a time stamp or time range. This icon may later be displayed in timelines created by QDA Miner (see [Creating and Editing Timelines](#)). You can change the icon of a specific time link by clicking the **Icon** button to the right of the dialog box and by choosing a new icon from a palette. QDA Miner allows you to choose among available Google Earth icons or offers the option to create your own icon (see [Attaching an Icon to a Hyperlink](#)).

Note: While clicking other types of links causes QDA Miner to move to another location or another application, clicking a time stamp or range link has no effect. Links with dates may, however, be searched based on date intervals (see [Link Retrieval](#)) and plotted on a timeline (see [Creating and Using Timelines](#)).

Another Case

To create a link to another case, you first need to select it by clicking the  button. You will be presented with a dialog box showing a list of all cases. Select the case you want to point to and click **OK**. The case description will automatically be stored in the **Case** edit box. This description can be edited to provide additional information.

Text or Coded Segments

Creating a link to another text or coded segment is done in a two-step process:

Step 1. Set the source segment

- Choose the text or coded segment to which the link should be attached and run the **HYPERLINK | ADD** command.
- Set the link type to **Text or Coded Segment**.
- Enter a description (optional) and then click **OK**. You will be returned to the main QDA Miner screen.

Step 2. Set the destination segment

- Move to the segment where the source segment should point.
- Select it and run the **HYPERLINK | SET AS DESTINATION** command from the contextual menu.

You will be asked whether you want to create a link back to the source. Selecting **Yes** will attach a second hyperlink to the destination segment that will point to the original segment, allowing you to jump back and forth between the two locations. Selecting **No** will create a single link from the source segment to the destination segment.

To edit a hyperlink:

- For hyperlinks associated with a coded segment, select its code mark from the right margin of the document (for images, you can also select from the bottom margin). For hyperlinks associated with a text segment, position the editing cursor anywhere within the text.
- Right-click to display the shortcut menu and select the **EDIT** command from the **HYPERLINK** menu item. Close the dialog box when finished editing. Note that it is not possible to change the hyperlink type with the **EDIT** command. To perform such a change, the hyperlink must be deleted and recreated.

To delete a hyperlink:

- For hyperlinks associated with a coded segment, select its code mark in the right margin of the document. For hyperlinks associated with a text segment, position the editing cursor anywhere within the text.
- Right-click to display the shortcut menu and select the **DELETE** command from the **HYPERLINK** menu item.

To follow a hyperlink:

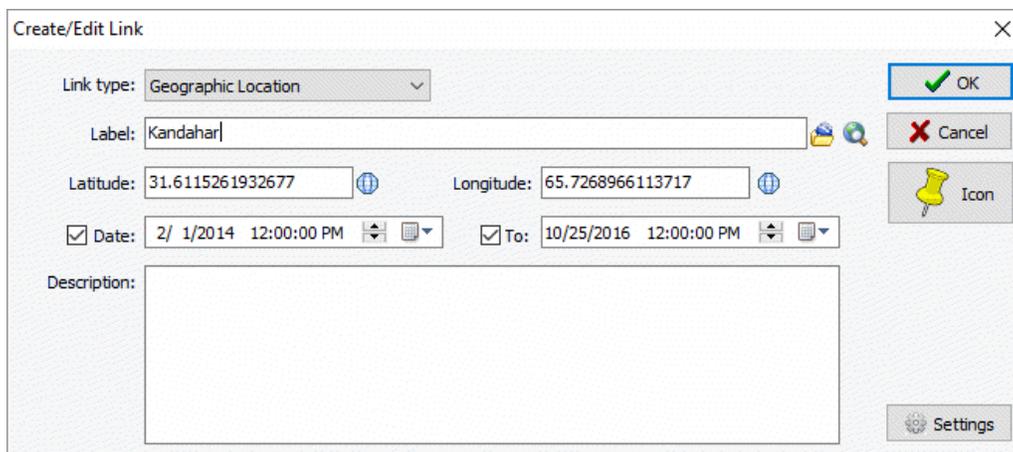
- Move the mouse cursor over the code mark or the coded segment containing the hyperlink.
- Hold the Control key down and click the link. You may also right-click to display the shortcut menu and select the **FOLLOW LINK** command from the **HYPERLINK** menu item.

Geo-tagging of Documents and Images

Geographic tagging allows you to associate a specific text or coded segment to a geographic location and, optionally, to a point in time or a time period, allowing you to situate an event both in space and in time. You can enter the coordinates of the geographic location manually in decimal values or in degrees, minutes and seconds, import the coordinates from Google KMZ or KML files or ESRI Shapefiles, or simply copy and paste placemarks from Google Earth.

To create a geographic tag:

- Select the text or coded segment to which you want to attach such a tag.
- Right-click to display the shortcut menu and select the **ADD** command from the **HYPERLINK** menu item.
- Set the Link Type option to **Geographic Location**. A dialog box similar to this one will appear:



The screenshot shows a dialog box titled "Create/Edit Link" with a close button (X) in the top right corner. The dialog contains the following fields and controls:

- Link type:** A dropdown menu set to "Geographic Location".
- Label:** A text input field containing "Kandahar". To the right of the field are icons for a folder and a globe.
- Latitude:** A text input field containing "31.6115261932677" with a globe icon to its right.
- Longitude:** A text input field containing "65.7268966113717" with a globe icon to its right.
- Date:** A checked checkbox followed by a date and time selector set to "2/ 1/2014 12:00:00 PM".
- To:** A checked checkbox followed by a date and time selector set to "10/25/2016 12:00:00 PM".
- Description:** A large empty text area.
- Buttons:** "OK" (with a green checkmark), "Cancel" (with a red X), "Icon" (with a yellow pushpin), and "Settings" (with a gear icon).

The **Label** edit box allows you to add a short description for this geographic tag. Such a label will be used as the placemark name in Google Earth and in other locations to identify these specific coordinates so that you may later retrieve them by name. We recommend entering a concise but unique label. The **Description** edit box could be used to enter a longer description. It may also be used to enter some keywords or key phrases that may later be searched for.

A geographic coordinate can be defined by specifying the **Latitude** and a **Longitude**. There are four ways to specify a geographic coordinate:

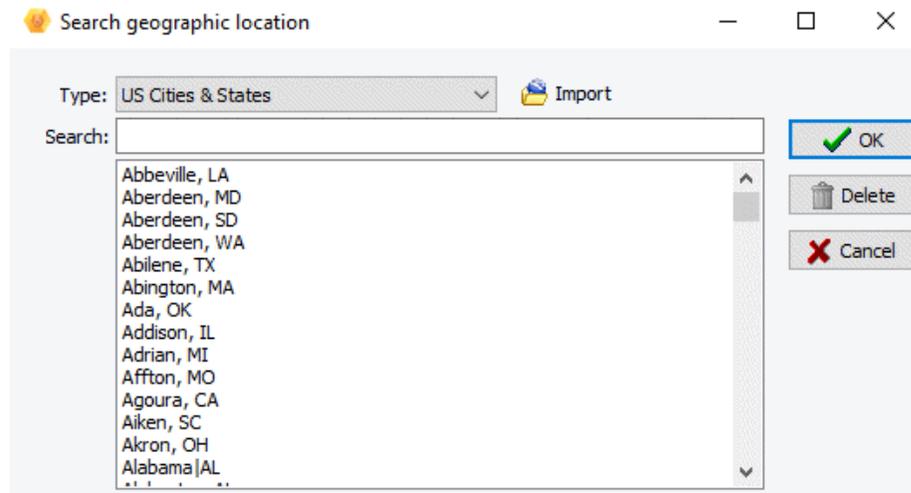
By entering data manually: You can specify the latitude and longitude manually by either entering the floating-point values associated with the geographic coordinates or by clicking the  button and entering the geographic coordinates in degrees, minutes, seconds and cardinal compass point.

By importing coordinates from a Google KMZ or KML file: Click the  button. An **Open File** dialog box will appear, allowing you to select either a Google KMZ or KML file. If several geographic locations are stored in the selected file, you will be asked to choose which geographic location to import. The placemark label and description (if any) will also be imported.

By cutting and pasting Google Earth placemarks: One of the easiest methods to identify the geographic coordinates of a specific location and to import these coordinates into QDA Miner is to use Google Earth to find the proper location and create a placemark in Google Earth itself. Once the placemark has been created, select it and press **Ctrl-C** (to copy it to

the clipboard) then move back to QDA Miner and paste it (using the **Ctrl-V** key combination).

By searching previously entered or imported locations: All geographic coordinates entered by the user in QDA Miner are automatically stored in QDA Miner along with their associated labels allowing you to search previously typed or imported coordinates. To access the search dialog box, click the  button located to the right of the **Label** edit box. A dialog box similar to this one will appear:



This dialog box allows you not only to search previously entered geographic locations but also to import geographic coordinates from ESRI Shapefiles or Google Earth KMZ or KML files (see [Importing Geographic Coordinates](#)). To select a geographic location, simply locate its label in the main list box, select it, and then click the **OK** button. Listed locations may be limited to those obtained from specific sources by setting the **Type** list box to a desired value. Setting this option to **All** will display coordinates from all sources. You may also filter coordinates by entering a specific keyword or key phrase in the **Search** edit box. The list of locations is updated while typing so as to display only those entries with labels containing the typed string (Note that the search is not case sensitive).

A date stamp or range may also be associated with the geographic location by selecting the **Date** check box and by specifying the date and time information. To specify a time range, set the **To** check box and then type the ending date and time.

Google Earth displays placemarks using a set of icons that may be customized by the user. These icons may also be displayed in timelines created by QDA Miner (see [Creating and Editing Timelines](#)). You can change the icon of a specific geographic location by clicking the **Icon** button to the right of the dialog box and by choosing a new icon from a palette. QDA Miner allows you to choose among available Google Earth icons or offers the possibility of creating your own icon (see [Attaching an Icon to a Hyperlink](#)).

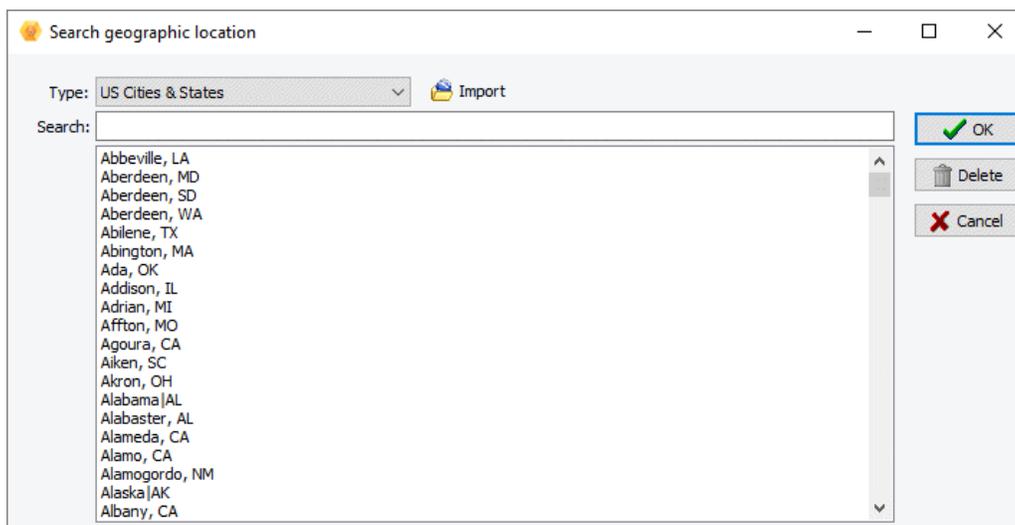
Once a geographic tag has been added to a text or coded segment, clicking this link while holding the **Ctrl** key creates a temporary KMZ file and opens it using Google Earth or any other application associated with this file type (for example, ArcGIS Explorer).

Importing Geographic Coordinates

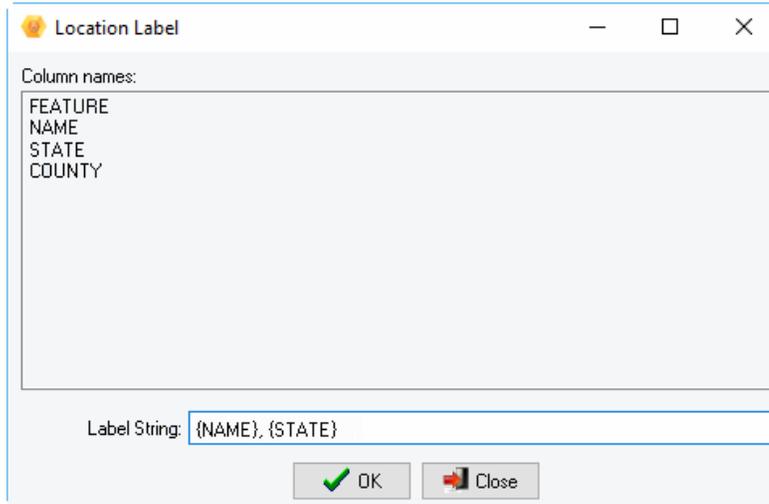
Geographic coordinates may be entered one at a time either by typing those coordinates, by cutting and pasting Google Earth placemarks, or by importing a single geographic coordinate stored in a KMZ or KML file. It is also possible to import multiple coordinates from Google KMZ or KML files or ESRI Shapefiles so that they become readily accessible for searching in QDA Miner. This importing feature of QDA Miner is available through the **Search Geographic Locations** dialog box. This dialog box can be accessed by clicking the  button found in the [Geographic_Hyperlink_Editor](#) or in the [Link_Retrieval](#) dialog box.

To import new geographic coordinates:

- Click the  button. An Open File dialog box will appear, allowing you to view all files with a .kml, kmz or .shp file extension.
- Select the file containing the coordinates to be imported and click **Open**. QDA Miner will read the selected file and display extracted coordinates and other information about each location in a dialog box similar to this one:



- In the **Save Under** edit box, enter the name of the list in which those locations will be saved. If an existing list name is typed, the new locations and their coordinates will be added to that existing list.
- A **Label** for each location also needs to be specified. This label consists of data from a single column or a combination of several columns. When importing KMZ or KML files, this label is automatically set to the **NAME** of the placemark. For ESRI Shapefiles containing several text data, you need to select columns that will be used to construct the label. To build such a label, click the **Click here to create a custom label** link. A dialog box similar to this one will appear:



The label may be changed by editing text in the **Label String** edit box. To insert the value stored in a specific field into the description, simply enter the column name (in uppercase letters) enclosed between braces. Alternatively, you can insert a column name at the current location by clicking the corresponding item in the **Column Names** list located just above the edit box.

If you enter the following string:

```
{NAME} , {STATE}
```

The `{NAME}` and `{STATE}` strings will be replaced with their corresponding column value for each location.

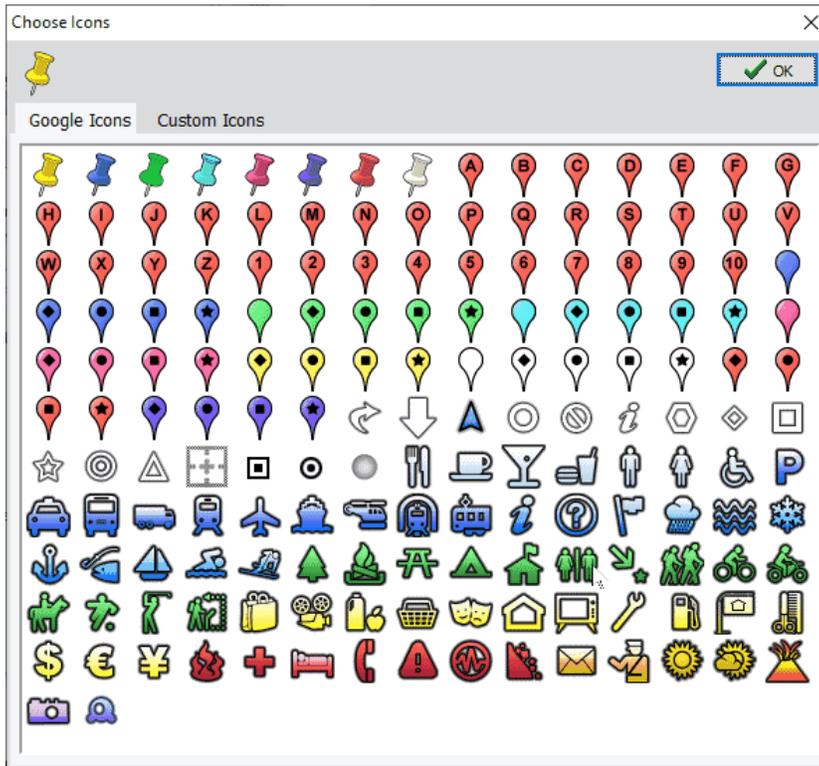
- To prevent importing of specific locations, simply select those locations and press the **Del** key.
- Once all options have been set, click the **OK** button to proceed with importing.

Attaching an Icon to a Hyperlink

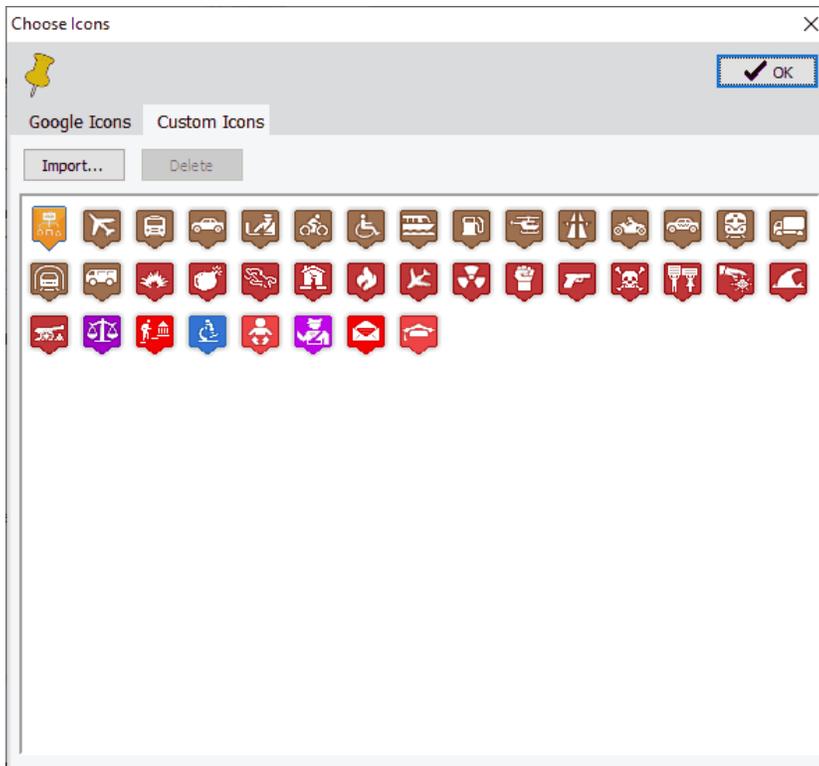
QDA Miner allows you to customize the icon that will be used to display placemarks in Google Earth as well as icons in timelines.

To change the icon associated with a geographic or time tag:

- Select the hyperlink which icon has to be changed, right-click and run the **HYPERLINK | EDIT** command.
- Click the  button. An icon palette dialog box similar to this one will appear:



- To select an icon from the Google icon collection, simply click the desired icon and close the dialog box.
- To select a custom icon, click the **Custom Icons** tab.



- Click the desired icon and close the dialog box.
- To create a custom icon from an existing image file, click the **Import** button. An **Open File** dialog

box will appear, allowing you to select this image file. Once selected, the image will be transformed into an icon, inserted into your list of custom icons and selected.

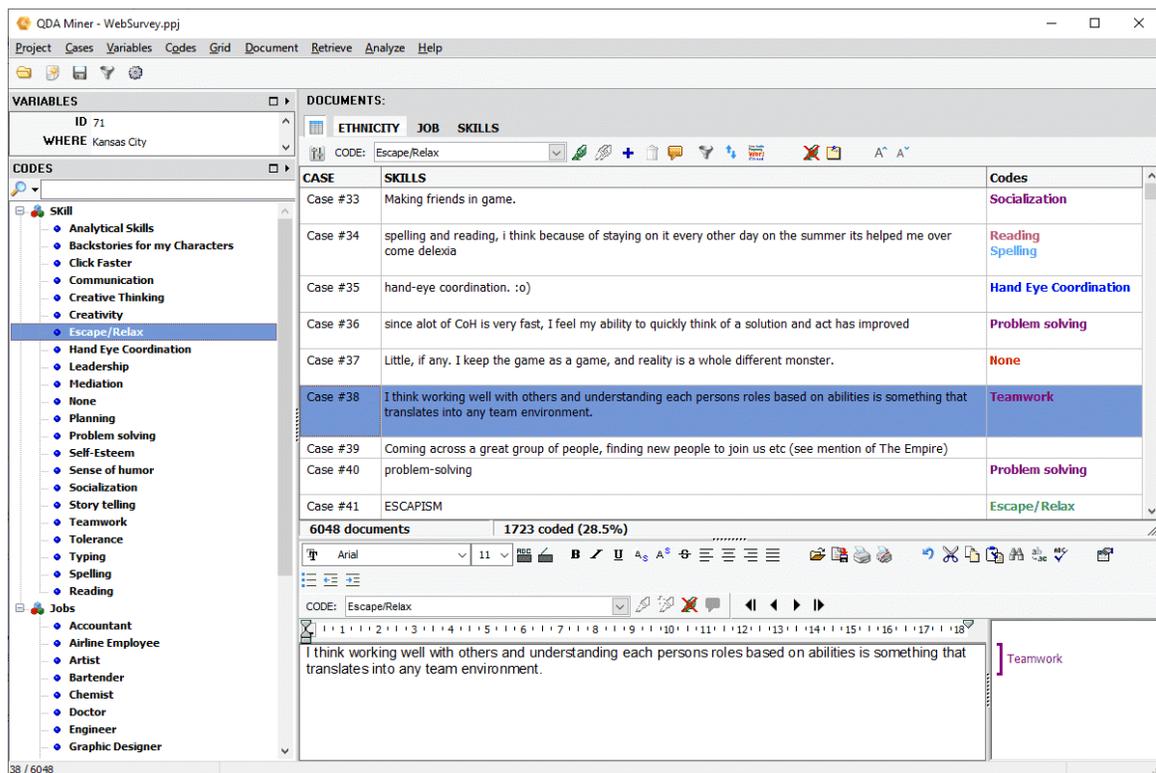
- To delete a custom icon, click it and then click the **Delete** button.

Coding Documents Using the Grid View

For coding short text responses such as open-ended responses or customer feedback, the large **DOCUMENTS** window can be split horizontally to reveal at the top a grid displaying text responses for all cases. This grid view allows coding full text responses while the lower document window remain visible for situations where one needs to code only a portion of text from the selected case. Various filtering and sorting operations are available as well as coding statistics. When the **Grid View** mode is active, the **CASES** window is hidden since browsing through cases and select them is now performed by moving through the grid row.

To enable the grid view mode

- Select the **VIEW | ON** menu item from the **GRID** menu, or click the  button in the upper left corner of the **DOCUMENTS** window.



When the grid view mode is enabled, QDA Miner reads all cases and displays in rows all cases containing text, ignoring empty ones.

The grid consists of three columns:

- The first column displays the case identifier set through the [Grouping/Case Descriptor](#) features.
- The middle column displays the text for the selected case and variable. If the text is too long, the first portion of it is displayed along with a note indicating that the text displayed in this row has been truncated. The maximum length of the text in each row may be adjusted through the grid settings by clicking the  button and changing the **Maximum Text Length** value.
- The third column on the right displays codings that have been assigned to the text response. The presence of comments attached to code marks is indicated through a **[C]** suffix appearing on the right of the code name.

The grid may be used to browse through those cases by selecting different rows and is synchronized with both the variables and the document window allowing one to view and edit values of other variables

as well as the text response.

Clicking the **A⁺** button increases the font size used to display text in the grid, while clicking the **A⁻** button will use smaller fonts.

Assigning codes to full text responses

The grid may be used to code entire text responses only. To code a portion of a text response, one needs to use either the document window located below the grid (see [Assigning Codes to Text Segments](#)) or any of the advanced text [retrieval tools](#) to code sentences or paragraphs meeting specific search criteria.

The grid view allows one to code text in various ways:

Method 1 - Quick assignments of codes to a single row

- Select the code from the codebook (bottom left of the screen) by clicking it and holding the mouse button down.
- While holding the mouse button down, drag the mouse cursor over the row you want to code.
- Release the mouse button to assign the dragged code to the row found under the mouse cursor.

Method 2 - Select one or several rows and double-click the code

- Select the row containing the text response you want to code. Multiple rows may be selected by holding down the CTRL key and clicking on all the rows to be coded. One may also use the SHIFT key to select a range of adjacent rows.
- Double-click the code in the code list.

Method 3 - Dragging one or more rows on a code

- Select the row(s) containing the text response you want to code.
- When selecting the last row, keep the mouse button down.
- While keeping the mouse button down, drag the rows to the left over the CODES windows.
- When the cursor is over the code you want to assign, release the mouse button.

Method 4 - Dragging a code on selected rows

- Select the row(s) containing the text response you want to code.
- Move to the codebook, click on the code you want to assign and keep the mouse button down.
- While keeping the mouse button down, move the mouse cursor over one of the select rows.
- Release the mouse button.

Method 5 - Using the coding tool bar buttons.

- Select the proper code from the list box located in the toolbar above the grid.
- Select the rows you want to code. One may select more than one row using the techniques just described.
- Click the  button.

- The  button may also be used to assign a code to all rows currently displayed and is best used in combination with the text filtering feature (see below) to restrict the coding to text containing specific keywords.

To remove a coding

- Select the row containing the code you would like to remove
- Click the  button located on the toolbar of the grid window or right-click and select the REMOVE command from the popup menu.
- Select the name of the code you would like to remove. If the selected code has been assigned more than once in the document, a dialog box will appear and display the list of all text segments to which this code has been assigned, allowing you to select which one to remove.

To add, Edit or Remove Comments to a Code

- Select the row containing the text segment to which you want to attach a comment.
- Click then  button or right-click to display a popup menu and select the COMMENT command.
- Select the name of the code to which you would like to attach a comment. If the selected code has been assigned more than once in the document, a dialog box will appear and display the list of all text segments to which this code has been assigned, allowing you to select the one to which the comment will be attached.



- Enter the text that you want to associate with the selected coded segment.
- Click the **X** button (in the upper-right corner) to save the comment and to close the window.

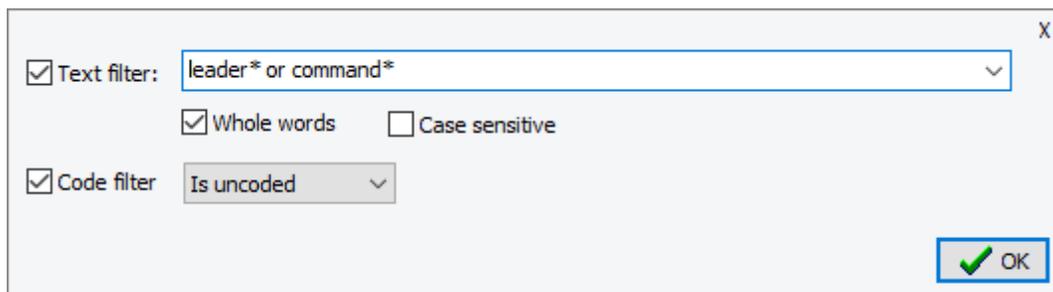
You can assign up to six types of comments to a single coding by clicking one of the color tabs in the upper-left corner of the dialog box (each color corresponds to a different comment type). The labels associated with those comment types appear on the right of those tabs and may be customized by clicking the  button.

When a note has been assigned to a coded segment a **[C]** label is added to the right of the code name in the right-most column of the grid. Its color corresponds to the comment color. If a coding contains more than one comment type, the label color will be set to the color of the first comment type. To edit an existing comment, follow the same steps described above. To remove a comment, simply open the comment editor and delete all text.

To retrieve a list of all comments in a project file see [Retrieving a List of Comments](#).

Filtering rows

When the grid view mode is first activated or when a new document variable is selected while this mode is enabled, QDA Miner reads cases and displays all cases containing text in the selected document variable, filtering out empty ones. Clicking down the  button or selecting the FILTER | EDIT command from the GRID menu brings a dialog box that allows you to filter rows using Boolean text search expressions, various coding conditions (uncoded, number of codes, presence or absence of codes), or a combination of both.



When a filter is active, the  button remains depressed and the leftmost column has a blue background to remind you that a filter condition is currently active and some rows may not be visible. This column may already have a blue background if a case filter is also active, again to make sure you are aware of the existence of a case filter condition that will affect further retrieval and analysis functions (see [filtering cases](#)).

By default, the grid filtering condition will affect all retrieval and analysis features of QDA Miner. It may be combined with the case filtering feature for additional conditions. It is however possible to disable this behavior so that retrieval and analysis will be performed on all cases even if a grid filter is on. Please note that the case filter conditions will remain active and will continue affecting those features. To disable the application of grid filters to other retrieval and analysis feature, click the  button, and remove the check mark for **Apply grid filter for all retrieval and analysis**.

Filtering rows using text filter

Text Filter: This edit box is used to specify words or phrases being searched for filtering rows. To search for a single word, simply enter the word in the edit box. In order to search for a phrase, you need to put the phrase between quotation marks or replace the space between words with underscore characters.

For example, entering either:

```
"quality of life"
```

or

```
quality_of_life
```

will retrieve text segments containing this phrase.

The Boolean operators **AND**, **OR** and **NOT** may also be used to build complex search expressions. For example, the following search string:

```
angry OR mad
```

will retrieve any case containing either the word "angry" or the word "mad" or both words.

Parentheses may also be used to specify the evaluation order in complex search expressions. For example, if you enter the following search expression:

```
(angry OR mad) AND (son OR daughter OR child)
```

QDA Miner will return all cases containing either "angry" or "mad", but only if this case also contains either one of the three words found in the second set of parentheses (e.g. "son", "daughter" or "child").

If several words are entered without a Boolean operator, then QDA Miner will assume that all those words are required, and thus behave as if you had entered an "AND" operator between those words.

Using wildcards in search expressions:

A wildcard is a character or a set of characters that may be used in a search expression to represent one or more characters. QDA Miner supports the following wildcards:

- ?** Matches any single character. For example, **F?T** will find **FAT**, **FIT** and any other combination of three characters beginning with 'F' and ending with 'T'.
- *** Matches any number of contiguous characters. For example, **T*ENT** will return every word starting with 'T' and ending with 'ENT' such as **TENT**, **TORRENT**, **TANGENT**, etc.
- #** Matches any numeric character.
- []** Matches any of the specified characters at that position. For example, **[abc]** will match if a or b or c at that position.
- [^]** or **[!]** Matches anything but the specified characters at that position. For example, **[^abc]** will match any single character, but a, b, or c.
- [a-e]** Matches a through e at that position.
- _** The underscore character may be used to replace space within words. For example, searching for **QUALITY_OF_LIFE** will match any instance of this phrase.

Whole words: This option defines whether the words in the search expressions may be part of a word or if only whole words are to be found. For example, if this option is disabled, searching for a word like "bank" will return any search unit containing not only "bank", but also "banking", "bankruptcy", etc.

Case sensitive: This option defines whether the search is case-sensitive or not. If enabled, only words with the exact same cases will be returned.

Filtering rows using codes

Grid rows may be filtered based on the codes appearing in the rightmost column of the grid. The following operators are available:

- Is** Displays only rows for documents that have not been coded yet.
- Uncoded**
- Is** Displays all rows containing a least one coding.
- Coded**

Less Than Display rows containing less than a specified number of codes. When this option is selected, a spin edit box allows you to specify a numerical value corresponding to the number of codes to use as the criterion.

More Than Display rows containing more than a specified number of codes. When this option is selected, a spin edit box allows you to specify a numerical value corresponding to the number of codes to use as the criterion.

Contains Either Use this option to filter rows containing any one of the specified codes. A checklist box is displayed on the right, allowing you to select one or several codes.

Contains All Use this option to filter rows containing all the specified codes. A checklist box is displayed on the right, allowing you to select one or several codes.

Does Not Contain Use this option to filter out rows containing any one of the specified codes. A checklist box is displayed on the right, allowing you to select one or several codes.

Please note that changes made to the coding of visible rows will not affect the current display of rows even if those changes result in a condition that would normally lead to the filtering out of such rows. To remove these rows, the filter needs to be reapplied. Such a behavior allows the coder to review any coding made to the visible rows. For example, if the grid displays only uncoded text segments, coding a row will not make this row disappear, allowing the coder to add another code, attach a comment or maybe remove a coding accidentally dropped on the wrong row.

To assign a code to all filtered cases:

- Use the **CODE** drop-down list located above this grid to select the code that you want to assign.
- Click the  button to assign the selected code to all text segments meeting the search expression.
- Prior to the assignment of a code to all search hits, you may want to remove selected hits that do not correspond to what you were looking for. To remove a search hit from the list, select its row and then click the  button.

Performing word frequency analysis on displayed rows

Clicking the  button performs a word frequency analysis on all rows currently being displayed and produces a word cloud as well as a word frequency table (see [Word Frequencies](#)).

When the word frequency feature is called from the grid view, a new option becomes available in the contextual (right-click) menus of the word cloud and the word frequency table, allowing you to apply a new grid filter with the selected word(s) or add those to the current grid filtering condition.

Sorting rows

Rows of the grid may be sorted by clicking on the column heading. Clicking on a column for the first time will sort in ascending order, while clicking again on the same column will sort rows in descending order. Clicking the  button provides additional sorting options.

Alphabetical This option will sort text responses in alphabetical order. While clicking the second column header will also sort text alphabetically, this command will ignore character cases as well as non-alphanumeric characters. For example, responses like "Good" "good" or "*** GOOD ***" will be located next to each other.

Text Length Sorting on text length will sort rows based on the length of the text response, moving to the top the shorter responses while longer responses are moved to the bottom of the grid. Performing such a sort after an alphabetical sort will group together identical responses with similar lengths.

| | |
|------------------------|--|
| Number of Codes | Sorting on the number of codes will arrange the grid so that uncoded items will be move to the top of the grid, followed by those with fewer codes, and those with more codes at the bottom. Such a display is useful for focusing initially on uncoded responses, and then on those with few codings. |
| Record Number | Selecting Record Number will arrange rows of the grid by their corresponding case number. |

Performing a search using the same option will result in a reversal of the row sort orders.

Retrieval Features

QDA Miner provides several search and retrieval tools to assist in the coding task. These tools may be used to speed up or systematize the coding of documents, ensure coding consistency, or retrieve relevant segments of documents, images or comments.

The [Text Retrieval](#) tool searches for specific text patterns in documents. Complex search patterns may be performed using Boolean operators. This search can be performed on all documents in a project or restricted to specific ones or to some coded segments.

The [Section Retrieval](#) tool searches structured documents for sections bounded by fixed delimiters. This feature is especially useful to automatically assign codes to recurring sections within a document or in multiple documents. You can search in all documents in a project or restrict the search to specific document variables.

The [Keyword Retrieval](#) feature can retrieve any document, paragraph, sentence, or coded segment containing a specific WordStat keyword or a combination of keywords.

The [Cluster Extraction](#) tool allows you to quickly identify all similar paragraphs or sentences in a large collection of documents and code them quickly.

The [Code Similarity](#) retrieval tool quickly identifies sentences or paragraphs that share some similarities with existing coded segments in the current project or those stored in another coded project.

The [Query by Example](#) retrieval tool may be used to search for text segments that are, in some ways, similar to a given example. It may also be used to find text similar to all segments associated with a specific code, and thus retrieve sentences or paragraphs that may potentially be coded the same way.

The [List Comments](#) feature allows you to retrieve comments attached to coded segments.

The [Link Retrieval](#) tool allows you to obtain a list of all hyperlinks, geographic tags or time tags in a project or to restrict this list to some link types or to those meeting specific search criteria. This dialog box also allows you to create timelines out of time tags as well as geographic maps for all links containing geographic coordinates.

The [Quotation matrix](#) tool allows you to produce a large matrix of text segments, comments or both text segments and comments for selected codes and for each case in the project.

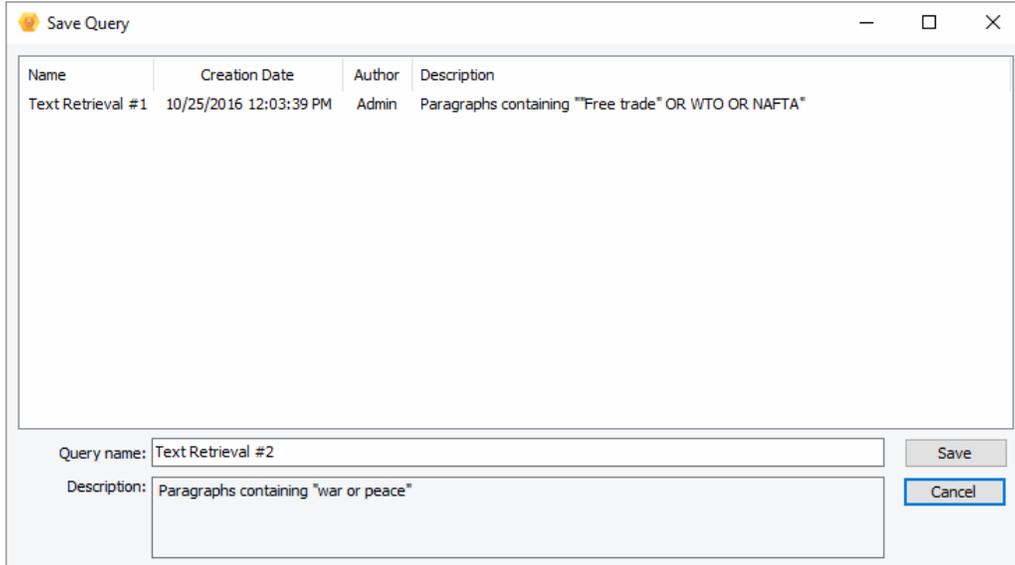
Saving and Retrieving Queries

QDA Miner provides different types of queries that enable you to find specific text patterns, to select subsets of cases, and to explore the relationships among codes and between those codes and case properties. The program allows you to save with the project different kinds of queries and analysis options and retrieve them later. QDA Miner provides savings and retrievals for the following functions:

Dialog boxes associated with each of these query types have two buttons: The  button is used to save the current question options with the project, while the  button is used to retrieve previously saved queries.

To save a query:

- Set the various options on the dialog box.
- Click the  button. A dialog box similar to the one below will appear:



The image shows a 'Save Query' dialog box with a table and input fields. The table has four columns: Name, Creation Date, Author, and Description. Below the table are two input fields: 'Query name:' and 'Description:'. To the right of these fields are 'Save' and 'Cancel' buttons.

| Name | Creation Date | Author | Description |
|-------------------|------------------------|--------|---|
| Text Retrieval #1 | 10/25/2016 12:03:39 PM | Admin | Paragraphs containing "Free trade" OR WTO OR NAFTA" |

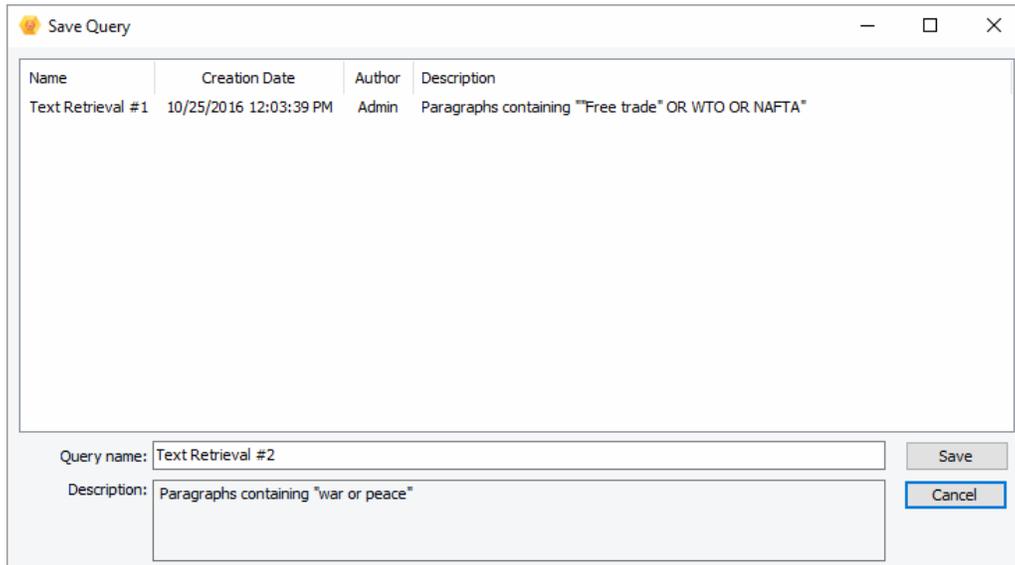
Query name:

Description:

- The program automatically provides a generic query name and a description. Edit this name and description and click the **Save** button to store this query with the project. If a query with an identical name already exists, you will be asked to confirm that you wish to overwrite it.

To retrieve a previously saved query:

- Open the dialog box associated with the task you want to perform.
- Click the  button. A dialog box similar to the one below will appear:



Please note that if no query of this type has been previously saved, this option will be disabled.

- From the list of previously saved queries, you can select the query you want to retrieve, either by double-clicking its line, or click it once and then clicking the **Open** button. You may also type its name in the **Query Name** edit box or select it from a drop-down list and then click the **Open** button to open it.

To delete a query:

- From the **Save Query** or **Load Query** dialog box, select the query you would like to delete.
- Click the **Del** keyboard key or right-click to display a pop-up menu and choose the **Delete** command.

To rename a query:

- From the **Save Query** or **Load Query** dialog box, select the query you would like to rename.
- Right-click to display a pop-up menu and choose the **Rename** command.
- Enter the new name and click **OK**.

To change the description of a query:

- From the **Save Query** or **Load Query** dialog box, select the query with the description you would like to modify.
- Right-click to display a pop-up menu and choose the **Edit Description** command.
- Change the description text and click **OK**.

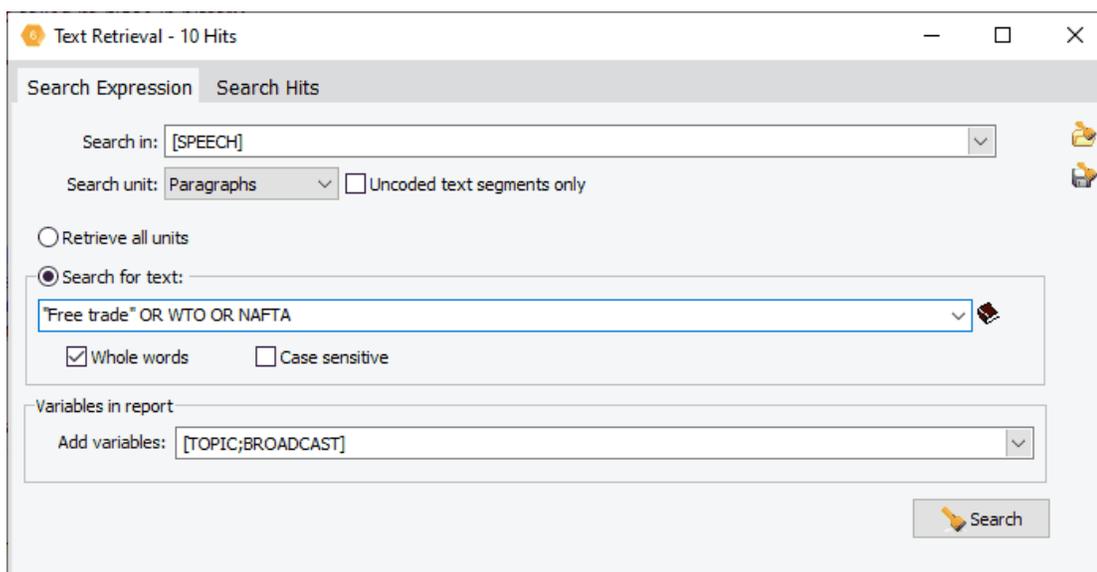
Another way to retrieve queries and analysis previously performed is to access the project command log, which usually keeps track of all operations performed on a project.

Text Retrieval

The **TEXT RETRIEVAL** function searches for specific text or combination of text in documents. You can search in all documents in a project or restrict the search to specific document variables. Searches can also be restricted to specific coded segments.

To start the text search feature:

- Select the **TEXT RETRIEVAL** command from the **RETRIEVE** menu. The following dialog box will appear:



On the first tab, **Search Expression**, you can set the search conditions while results are displayed on the **Search Hits** tab. When entering this dialog box, the second tab is normally disabled. As soon as a search returns at least one hit, QDA Miner will enable this second tab, allowing you to review the search hits and optionally assign codes to them.

Search Expression

Search in: This option allows you to specify on which document variables the search will be performed. If the current project contains more than one document variable, you will have a choice of selecting either one or a combination of them. By default, all document variables are selected. To restrict the analysis to only a few of them, click the down arrow key to the right of the list box. You will be presented with a list of all available document variables. Select the variables you wish to search.

Search unit: This option determines the search unit on which the search will be performed as well as what will be retrieved. You can select three different search units.

Documents: QDA Miner will apply the search expression on each document associated with a specific case. If a specific document meets the search condition, its location will be returned.

Paragraphs: QDA Miner will return any paragraph meeting the search condition.

Sentences: QDA Miner to return sentences meeting the search condition.

Coded Segments: This search unit restricts the search to the text segments that have already been coded. When a coded segment meets the search condition, its entire text is returned, no matter whether it is a single word or several paragraphs. To restrict the search to specific codes, select the **Selected** radio button on the right side of this option and select the codes from the drop-down checklist by clicking the arrow button at the right end of this list. These codes can also be selected from a tree representation of the codebook by clicking the  button. To perform the search on all codes, select the **All** radio button.

When searching sentences or paragraphs, you may restrict the retrieved text segments to those that have not been previously coded by enabling the **Uncoded Text Segment Only** check box.

Retrieve all units: Select this radio button if you do not wish to search for text containing specific words instead wish to retrieve all the text, broken down into the chosen search unit, whether it be documents, paragraphs, sentences, or coded segments.

Search for text: This edit box is used to specify words or phrases being searched for. To search for a single word, simply enter the word in the edit box. In order to search for a phrase, you need to put the phrase between quotation marks or replace the space between words with underscore characters.

For example, entering either:

`"quality of life"`

or

`quality_of_life`

will retrieve text segments containing this phrase.

The Boolean operators **AND**, **OR** and **NOT** may also be used to build complex search expressions.

For example, the following search string:

`angry OR mad`

will retrieve any search unit containing either the word "angry" or the word "mad" or both words.

Parentheses may also be used to specify the evaluation order in complex search expressions.

For example, if you enter the following search expression:

`(angry OR mad) AND (son OR daughter OR child)`

and set the **Search Unit** option to **Paragraphs**, QDA Miner will return all paragraphs containing either "angry" or "mad", but only if this paragraph also contains either one of the three words found in the second set of parentheses (e.g. "son", "daughter" or "child").

If several words are entered without a Boolean operator, then QDA Miner will assume that all those words are required, and thus behave as if you had entered an **"AND"** operator between those words.

Using wildcards in search expressions:

A wildcard is a character or a set of characters that may be used in a search expression to represent one or more other characters. QDA Miner supports the following wildcards:

- ?** Matches any single character. For example, **F?T** will find **FAT**, **FIT** and any other combination of three characters beginning with 'F' and ending with 'T'.
- *** Matches any number of contiguous characters. For example, **T*ENT** will return every word starting with 'T' and ending with 'ENT' such as **TENT**, **TORRENT**, **TANGENT**, etc.
- #** Matches any numeric character.
- []** Matches any of the specified characters at that position. For example, **[abc]** will match if a or b or c at that position.
- [^] or [!]** Matches anything but the specified characters at that position. For example, **[^abc]** will match any single character, but a, b, or c.
- [a-e]** Matches a through e at that position.

- The underscore character may be used to replace space within words. For example, searching for **QUALITY_OF_LIFE** will match any instance of this phrase.

To perform a thesaurus-based search:

A thesaurus-based search allows you to search for several words or phrases associated with a single thesaurus entry previously defined. For example, by entering a single category @GOOD (with an ampersand character "@" as a prefix), the program can automatically search for items that have been associated with this category, like "good", "fine", "excellent", "all right", "topnotch", etc. Names of categories may be typed directly in the search expression by preceding the category with a @ character.

For example, the following text search expression: @GOOD and @SERVICE will retrieve all text units containing either one of the words or phrases associated with the thesaurus entry GOOD along with any word or phrase included in the SERVICE thesaurus entry.

You may also insert a category, by clicking the  button to display the thesaurus editing dialog box, selecting the thesaurus entry and then clicking the Insert button. The Thesaurus Editing dialog box allows you to create new entries or edit existing ones. For more information on thesaurus searches, see [Thesaurus Editing](#).

Whole words: This option defines whether the words in the search expressions may be part of a word or if only whole words are to be found. For example, if this option is disabled, searching for a word like "bank" will return any search unit containing not only "bank", but also "banking", "bankruptcy", etc.

Case sensitive: This option defines whether the search is case-sensitive or not. If enabled, only words with the exact same cases will be returned.

Add variables: This drop-down checklist box may be used to add the values stored in one or more variables to the table of retrieved segments.

- To store the search expression and options, click the  button and specify the name under which those query options will be saved.
- To retrieve a previously saved query, click the  button and select the name of the query you would like to retrieve from the displayed list. For more information, see [Saving and Retrieving Queries](#).
- To perform the search, click the  button. The results of a search are displayed in a table located on the **Search Hits** tab.

Search Hits

- Select the **Search Hits** tab to see the table of hits generated by your search expression.

| Case # | Case | Variable | Paragraph | Nb hits | Text |
|--------|-------------------------|----------|-----------|---------|---|
| 1 | Buchanan - Announcement | SPEECH | 16 | 1 | NAFTA and GATT have bequeathed us a trillion-dollar merchandise trade deficit. Our deficit in manufactures, \$200 billion last year alone, was 12 times our shrinking trade surplus in farm goods. Taxpayers have been forced to underwrite titanic bailouts of Mexico, Asia, Russia and Brazil. This administration ran to the rescue of an Indonesian dictator, who had on his hands the blood of a quarter million Catholics, and then turned a stone face to steelworkers in Pennsylvania, Ohio, and West Virginia, as their dreams are buried under the devalued and dumped imports of Russia, Japan, and Brazil. Heartland industries are being sacrificed to enrich a global elite that looks on workers not as fellow human beings but as pawns in a game of global chess. |
| 3 | Bush - Foreign Policy | SPEECH | 30 | 1 | Some have tried to pose a choice between American ideals and American interests-between who we are and how we act. But the choice is false. America, by decision and destiny, promotes political freedom - and gains the most when democracy advances. America believes in free markets and FREE TRADE - and benefits most when markets are opened. America is a peaceful power - and gains the greatest dividend from democratic stability. Precisely because we have no territorial objectives, our gains are not measured in the losses of others. They are counted in the conflicts we avert, the prosperity we share and the peace we extend. |
| 3 | Bush - Foreign Policy | SPEECH | 50 | 1 | This is accomplished by concentrating on enduring national interests. And these are my priorities. An American president should work with our strong democratic allies in Europe and Asia to extend the peace. He should promote a fully democratic Western Hemisphere, bound together by FREE TRADE . He should defend America's interests in the Persian Gulf and advance peace in the Middle East, based upon a secure Israel. He must check the contagious spread of |

The table provides basic information on each hit, such as the case number and label, as well as the document variable in which it was found, the hit location, etc. To sort this list of hits in ascending order on any column values, simply click this column header. Clicking a second time on the same column header sorts the rows again in descending order. Columns may be reordered by dragging and dropping them in the desired location.

Selecting an item in this table, either by clicking it or by using the keyboard cursor keys such as the **Up** or **Down** arrow keys, automatically displays the corresponding case and document in the main window. If the search unit was set to **Paragraphs** or **Coded Segments**, selecting a specific hit will also highlight the corresponding text segment. This feature provides a way to examine the retrieved segment in its surrounding context. You can also assign an existing code to the highlighted segment.

To assign code to a retrieved section:

- In the table of search hits, select the row corresponding to the text segment you want to code.
- Use the **CODE** drop-down list located above this table to select the code you want to assign.
- Click the  button to assign the selected code to the highlighted text segment.

To assign a code to all retrieved sections:

- Use the **CODE** drop-down list located above this table to select the code that you want to assign.
- Click the  button to assign the selected code to all text segments meeting the search expression.
- Prior to the assignment of a code to all search hits, you may want to remove selected hits that do not correspond to what you were looking for. To remove a search hit from the list, select its row and then click the  button.

To compute a word frequency analysis on the retrieved text segments:

- Click the  button.

For more information on this feature, see [Word Frequency Analysis](#).

To display the automatic text classification panel:

- Click the  button. A panel will appear at the bottom of this hit list, allowing you to apply an automatic text classification model on the retrieved text segments. Clicking this button again, will hide the panel.

For more information on this feature, see [Automatic Text Classification](#).

To analyze the text of all retrieved segments using WordStat:

- Click the  button. QDA Miner will minimize itself and run WordStat, allowing you to perform a quantitative content analysis or apply text-mining techniques on the retrieved text segments. WordStat will also allow you to perform keyword comparisons across any other column in the table. To include additional data for comparison analysis, use the **Add Variables** option.

To display the coding table:

- Click the  button. A dialog box will appear allowing you to code retrieved text segments using drag and drop operations, remove existing codings and attach comments to codes.

For more information on this feature, see [Coding Text Segments Using the Coding Table](#).

To append a copy of the table in the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.
- To append only a single hit from the table, select the row containing the text segment you want to append to the Report Manager and click the  button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear.
- In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV), and Stata data file (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.
- Type a valid file name with the proper file extension.
- Click the **Save** button.

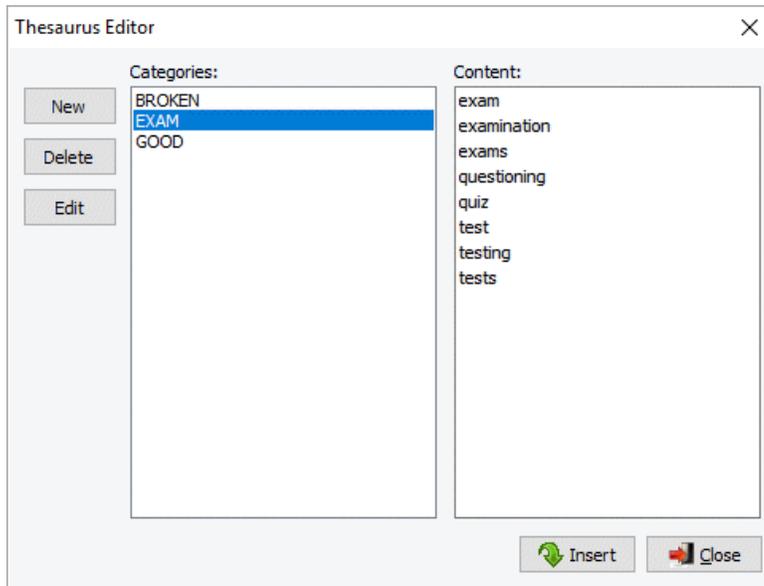
To print the table:

- Click the  button.

Thesaurus Editing

A thesaurus-based text search allows you to search for several words or phrases associated with a single thesaurus entry previously defined. The Thesaurus Editor allows you to create entries that can later be used in text search expressions to retrieve text units containing anyone of those words or phrases.

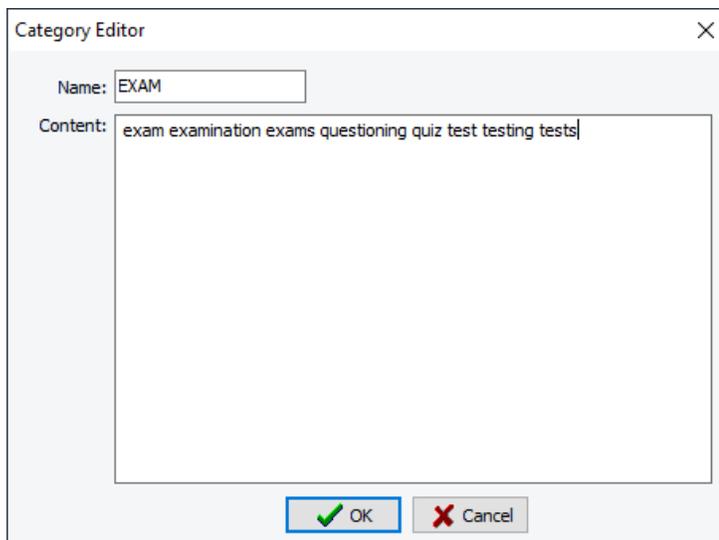
- The Thesaurus Editor can be accessed from the Text Search dialog box by clicking the  icon located next to the text search expression. When activate, a dialog box similar to this one appears.



The dialog box displays a list of items currently defined. To view words and phrases associated with an entry, simply select the item in the **CATEGORIES** list. Items associated with the highlighted category are listed on the right side of the dialog box in the **CONTENT** list box.

To create a new category:

- Click the **NEW** button. A dialog box similar to this one will appear.



- Enter the name of the category. This will be the placeholder to be used in search expression.
- Type the list of words you would like to search for when the category name is entered in a search expression. You may separate words by spaces or line breaks. Spaces in phrases should be replaced by an underscore character. For example, to search for the phrase "quality of life", you have to type "quality_of_life". You may also use any one of the valid wildcards supported by QDA Miner ([click here for more information on supported wildcards](#)).
- Click the **OK** button to store the newly defined category.

To edit an existing category:

- Select the category you would like to edit.
- Click the **EDIT** button.
- Edit the list of items associated with the category.
- Click the **OK** button to store the newly defined category.

To delete an existing category:

- Select the category you would like to delete.
- Click the **Delete** button.

To insert a category into a search expression:

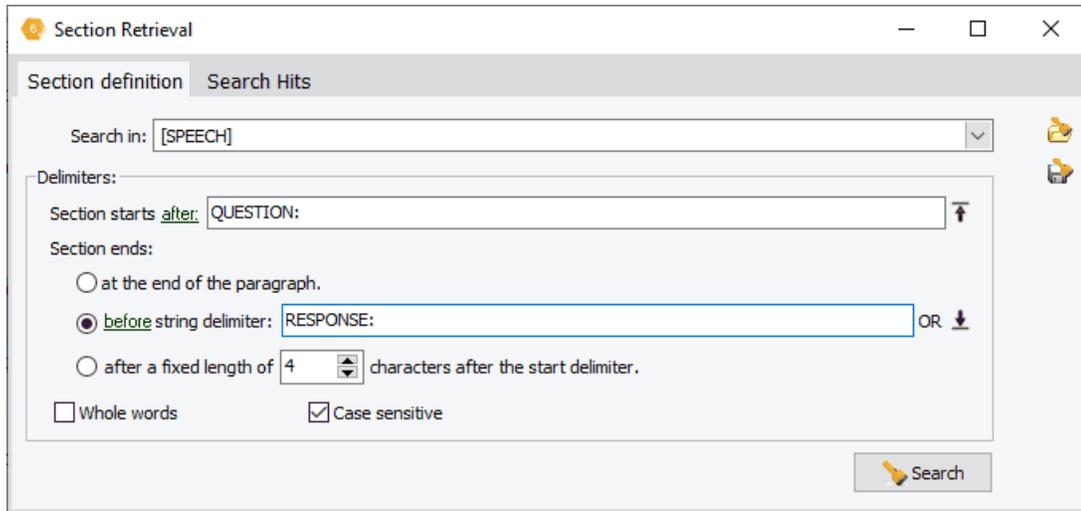
- Select the category you would like to insert.
- Click the **Insert** button.

Section Retrieval

The **SECTION RETRIEVAL** function searches structured documents for sections bound by fixed delimiters. This feature is especially useful when automatically assigning codes to recurring sections within a single document or in multiple documents. Searches can be done in all documents in a project or can be restricted to specific document variables.

To start the section search feature:

- Select the **SECTION RETRIEVAL** command from the **RETRIEVE** menu. The following dialog box will appear:



On the first tab, **Search Definition**, you set the search conditions and the results are displayed on the **Search Hits** tab. When entering this dialog box, the second tab is initially disabled. As soon as a search returns at least one hit, QDA Miner will enable this second tab, allowing you to review the search hits and optionally assign codes to them.

Section Definition

Search in: This option allows you to specify on which document variables the search will be performed. If the current project contains more than one document variable, you will have a choice of selecting either one or a combination of them. By default, all document variables are selected. To restrict the analysis to only a few of them, click the down arrow key to the right of the list box. You will be presented with a list of all available document variables. Select the variables on which you want the search to be performed.

The **Delimiters** section option set allows you to specify which delimiters are used to define the starting and ending points of a section.

Section starts after: This option specifies which fixed string of characters is used to delimit the start of the section. By default, the retrieved section begins after this fixed string of characters. To include this delimiter in the retrieved segment, click the **after** label to display a context menu and select **with**.

Section ends: This option allows you to select the method used to specify the length of the section.

Three methods are available:

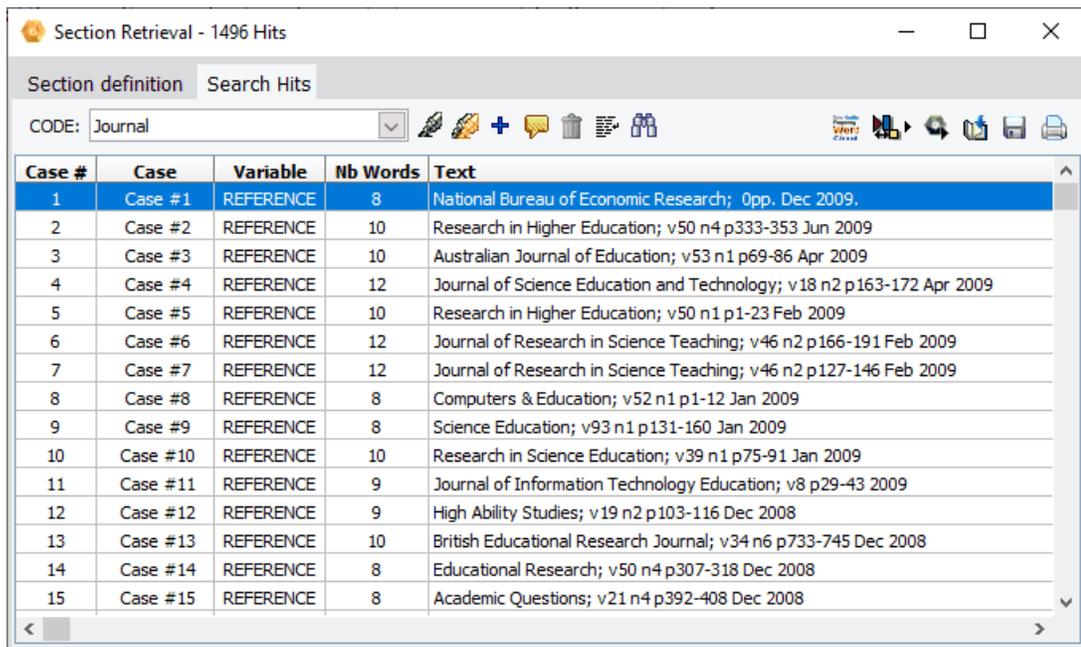
1. If you select **at the end of the paragraph** the program retrieves all text found from the start delimiter up to the end of the paragraph.
2. Selecting **before string delimiter** allows you to specify a fixed string of characters found at the end of a section. By default, the retrieved section does not include this delimiter and ends before it. To include this delimiter, simply click the **before** label to display a context menu and select **with**.
3. The third method allows you to retrieve **a fixed number of characters after the end of the starting delimiter**.

Case sensitive: This option defines whether the search is case-sensitive or not. If enabled, only string delimiters with the exact same cases will be recognized.

- To store the search expression and options, click the  button and specify the name under which those query options will be saved.
- To retrieve a previously saved query, click the  button and select from the displayed list the name of the query you would like to retrieve (for more information, see [Saving and Retrieving Queries](#)).
- To perform the search, click the  button. The results are displayed in a table located on the **Search Hits** tab.

Search Hits

- Select the **Search Hits** tab to see the table of hits generated by your search expression.



| Case # | Case | Variable | Nb Words | Text |
|--------|----------|-----------|----------|---|
| 1 | Case #1 | REFERENCE | 8 | National Bureau of Economic Research; 0pp. Dec 2009. |
| 2 | Case #2 | REFERENCE | 10 | Research in Higher Education; v50 n4 p333-353 Jun 2009 |
| 3 | Case #3 | REFERENCE | 10 | Australian Journal of Education; v53 n1 p69-86 Apr 2009 |
| 4 | Case #4 | REFERENCE | 12 | Journal of Science Education and Technology; v18 n2 p163-172 Apr 2009 |
| 5 | Case #5 | REFERENCE | 10 | Research in Higher Education; v50 n1 p1-23 Feb 2009 |
| 6 | Case #6 | REFERENCE | 12 | Journal of Research in Science Teaching; v46 n2 p166-191 Feb 2009 |
| 7 | Case #7 | REFERENCE | 12 | Journal of Research in Science Teaching; v46 n2 p127-146 Feb 2009 |
| 8 | Case #8 | REFERENCE | 8 | Computers & Education; v52 n1 p1-12 Jan 2009 |
| 9 | Case #9 | REFERENCE | 8 | Science Education; v93 n1 p131-160 Jan 2009 |
| 10 | Case #10 | REFERENCE | 10 | Research in Science Education; v39 n1 p75-91 Jan 2009 |
| 11 | Case #11 | REFERENCE | 9 | Journal of Information Technology Education; v8 p29-43 2009 |
| 12 | Case #12 | REFERENCE | 9 | High Ability Studies; v19 n2 p103-116 Dec 2008 |
| 13 | Case #13 | REFERENCE | 10 | British Educational Research Journal; v34 n6 p733-745 Dec 2008 |
| 14 | Case #14 | REFERENCE | 8 | Educational Research; v50 n4 p307-318 Dec 2008 |
| 15 | Case #15 | REFERENCE | 8 | Academic Questions; v21 n4 p392-408 Dec 2008 |

The table provides basic information on each hit, such as the case number and label, as well as the document variable in which it was found, the hit location, etc. To sort this list of hits in ascending order on any column values, simply click this column header. Clicking a second time on the same column header sorts the rows again in descending order. Columns may be reordered by dragging and dropping them in the desired location.

Selecting an item in this table, either by clicking it or by using the keyboard cursor keys such as the **Up** or **Down** arrow keys, automatically displays the corresponding case and document in the main window. This feature provides a way to examine the retrieved segment in its surrounding

context. You can also assign an existing code to the highlighted segment.

To assign a code to a specific search hit:

- In the table of search hits, select the row corresponding to the text segment you want to code.
- Use the **CODE** drop-down list located above this table to select the code you want to assign.
- Click the  button to assign the selected code to the highlighted text segment.

To assign a code to all search hits:

- Use the **CODE** drop-down list located above this table to select the code that you want to assign.
- Click the  button to assign the selected code to all text segments meeting the search expression.
- Prior to the assignment of a code to all search hits, you may want to remove selected hits that do not correspond to what you were looking for. To remove a search hit from the list, select its row and then click the  button.

To compute a word frequency analysis on the retrieved text segments:

- Click the  button.

For more information on this feature, see [Word Frequency Analysis](#).

To display the automatic text classification panel:

- Click the  button. A panel will appear at the bottom of this hit list, allowing you to apply an automatic text classification model on the retrieved text segments. Clicking this button again, will hide the panel.

For more information on this feature, see [Automatic Text Classification](#).

To analyze the text of all retrieved segments using WordStat:

- Click the  button. QDA Miner will minimize itself and run WordStat, allowing you to perform a quantitative content analysis or apply text-mining techniques on the retrieved text segments. WordStat will also allow you to perform keyword comparisons across any other column in the table. To include additional data for comparison analysis, use the **Add Variables** option.

To display the coding table:

- Click the  button. A dialog box will appear allowing you to code retrieved text segments using drag and drop operations, remove existing codings and attach comments to codes.

For more information on this feature, see [Coding Text Segments Using the Coding Table](#).

To append a copy of the table in the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.

- To append only a single hit from the table, select the row containing the text segment you want to append to the Report Manager and click the  button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear.
- In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV), and Stata data file (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.
- Type a valid file name with the proper file extension.
- Click the **Save** button.

To print the table:

- Click the  button.

Keyword Retrieval

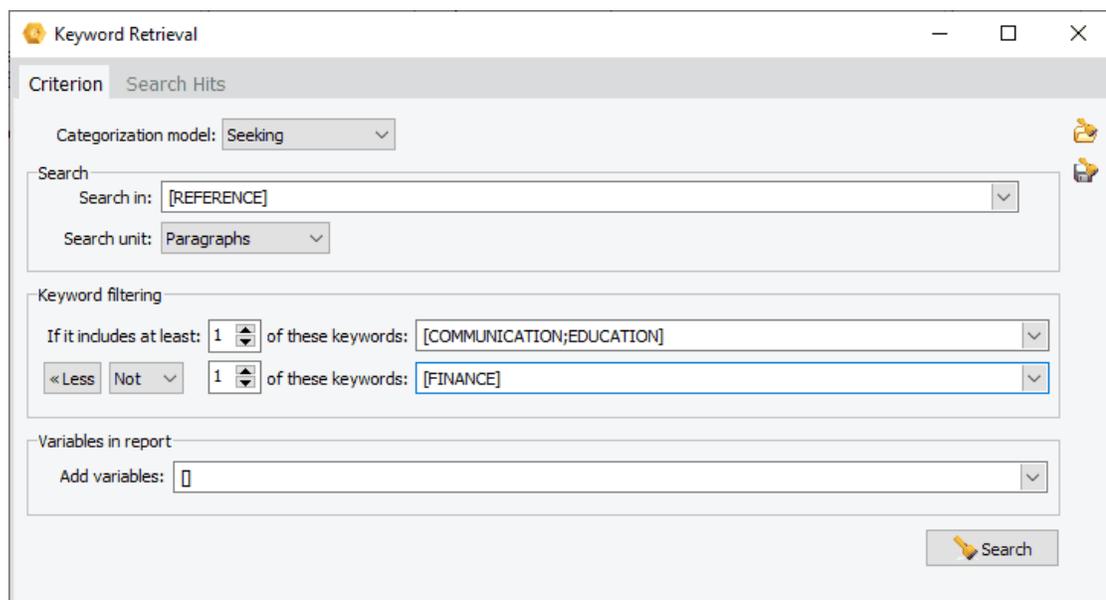
The **KEYWORD RETRIEVAL** feature can be used to retrieve any document, paragraph, sentence, or coded segment containing a specific keyword or a combination of keywords associated with a QDA Miner code or stored in a WordStat content analysis dictionary.

QDA Miner allows you to attach to any code in the codebook a list of keywords that are likely to be found in segments where such a code may apply. These keywords can take the form of individual words, word patterns and key phrases. For example, if you have a code named Globalization, you may enter words like "Free Trade", "World Trade", "NAFTA", or "WTO". Once these keywords have been entered, the Keyword Retrieval feature may be used to search for any text segment that contains any one of those words. In a sense, a list of keywords is a kind of predefined search that is stored with a code within the codebook.

Keywords may also be stored externally in categorization model files. Categorization models are advanced content analysis processes created by WordStat 5.0 or later and saved to disk in a .wcat file. A WordStat categorization model may involve various text processing such as stemming, lemmatization and word exclusions. It also involves the categorization of words, word patterns, and phrases and may also include complex coding rules involving Boolean and proximity operators. Such rules may be used to perform disambiguation of words or coding of complex actions. In order to be used within QDA Miner, categorization models should be stored in a Models subfolder located under the main program folder.

To start the keyword retrieval feature:

- Select the **KEYWORD RETRIEVAL** command from the **RETRIEVAL** menu. The following dialog box will appear:



Criterion

Categorization model: This option lists all WordStat categorization models available in the Models subfolder. If keywords have been stored with the current project codebook, the list will also include the **<Internal keyword>** item. The first step to access the keyword retrieval features is to select a categorization model. Once a model has been selected, the other search and formatting options become available.

Search in: This option allows you to specify on which document variables the search will be performed. If the current project contains more than one document variable, you will have a choice of selecting either

one or a combination of them. By default, all document variables are selected. To restrict the analysis to only a few of them, click the down arrow key to the right of the list box. You will be presented with a list of all available document variables. Select the variables on which you want the search to be performed.

Search unit: This option determines the search unit on which the search will be performed as well as what will be retrieved. You can select three different search units:

Documents: QDA Miner will apply the search expression on each document associated with a specific case. If a specific document meets the search condition, its location will be returned.

Paragraphs: QDA Miner will return any paragraph meeting the search condition.

Sentences: QDA Miner to return sentences meeting the search condition.

Coded Segments: This search unit restricts the search to the text segments that have already been coded. When a coded segment meets the search condition, its entire text is returned, no matter whether it is a single word or several paragraphs. To restrict the search to specific codes, select the **Selected** radio button on the right side of this option and select the codes from the drop-down checklist by clicking the arrow button at the right end of this list. These codes can also be selected from a tree representation of the codebook by clicking the  button. To perform the search on all codes, select the **All** radio button.

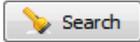
The **Keyword filtering** group of options allows you to select the keyword category on which the retrieval will be based.

Setting the numerical value of the **If it includes at least** option allows you to retrieve text units containing a minimum number of keywords from a selected list. To select the keyword categories, click the arrow button to show all available categories and then click the desired items. The minimum number of keyword categories a specific unit must contain in order to be retrieved is specified using a small edit box with spin buttons on the right. Setting this numerical value to the total number of keyword categories selected will force the program to retrieve only those units containing all those categories. Setting this number to a lower value will retrieve all text units containing at least this number of categories from the selected list. In the example shown above, any unit containing keywords from at least one of the two categories ART and NIGHTLIFE will be retrieved.

To enter a second filtering condition, click the  button. You can choose to link the two filtering conditions using either one of the three Boolean expressions: **AND**, **OR** or **NOT**. Choosing **AND** will retrieve all text units fulfilling both criteria; selecting **OR** will result in a retrieval of text units meeting either the first or the second condition, or both, while choosing the **NOT** Boolean operator will retrieve text units meeting the first condition but not the second one.

To limit the filtering conditions to a single statement, click the  button.

Add variables: This drop-down checklist box may optionally be used to add the values stored in one or more variables to the table of retrieved segments for the specific case from which a text segment originates.

- To store the search expression and options, click the  button and specify the name under which those query options will be saved.
- To retrieve a previously saved query, click the  button and select the name of the query you would like to retrieve from the displayed list. For more information, see [Saving and Retrieving Queries](#).
- Once all the search options have been set properly, simply click the  button to retrieve the selected text units.

Working with the Retrieved Text Units

The retrieved text units are displayed in a table found on the **SEARCH HITS** page. This table contains both the case number and the variable from which the segment originates, as well as the value of all additional variables selected by the user (see the **ADD VARIABLES** option above). When searching for paragraphs, sentences or coded segments, the table also displays the text associated with the retrieved unit and its location (its paragraph and sentence number). By using arrow keys or by clicking on a row the associated text is displayed in a separate window at the bottom of the screen with all keywords in bold.

To sort the table of retrieved units in ascending order in any column, simply click the column header. Clicking the same column header a second time sorts the rows in descending order. Columns may be reordered by dragging and dropping them in the desired location. Tables may also be printed, stored as a text report, or exported to disk in various file formats such as Excel, MS Word, ASCII, HTML, or XML.

To remove a search hit from the hit list:

- Select its row and then click the  button.

To assign a code to a specific search hit:

- In the table of search hits, select the row corresponding to the text segment you want to code.
- Use the **CODE** drop-down list located above this table to select the code you want to assign.
- Click the  button to assign the selected code to the highlighted text segment.

To assign a code to all search hits:

- Use the **CODE** drop-down list located above this table to select the code that you want to assign.
- Click the  button to assign the selected code to all text segments meeting the search expression.
- Prior to the assignment of a code to all search hits, you may want to remove selected hits that do not correspond to what you were looking for. To remove a search hit from the list, select its row and then click the  button.

To create a report of retrieved segments:

- Click the  button. The sort order of the current table is used to determine the display order in the report. This report is displayed in a text-editing dialog box and may be modified, stored on disk (in RTF, HTML or plain text format), printed, or cut-and-pasted into another application. Graphics and tables may also be inserted anywhere in this report.

To compute a word frequency analysis on the retrieved text segments:

- Click the  button.

For more information on this feature, see [Word Frequency Analysis](#).

To display the automatic text classification panel:

- Click the  button. A panel will appear at the bottom of this hit list, allowing you to apply an

automatic text classification model on the retrieved text segments. Clicking this button again, will hide the panel.

For more information on this feature, see [Automatic Text Classification](#).

To analyze the text of all retrieved segments using WordStat:

- Click the  button. QDA Miner will minimize itself and run WordStat, allowing you to perform a quantitative content analysis or apply text-mining techniques on the retrieved text segments. WordStat will also allow you to perform keyword comparisons across any other column in the table. To include additional data for comparison analysis, use the **Add Variables** option.

To display the coding table:

- Click the  button. A dialog box will appear allowing you to code retrieved text segments using drag and drop operations, remove existing codings and attach comments to codes.

For more information on this feature, see [Coding Text Segments Using the Coding Table](#).

To append a copy of the table in the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.
- To append only a single hit from the table, select the row containing the text segment you want to append to the Report Manager and click the  button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear.
- In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV), and Stata data file (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.
- Type a valid file name with the proper file extension.
- Click the **Save** button.

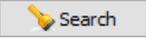
To print the table:

- Click the  button.

Dates and Locations

The **SEARCH IN** option allows you to specify which document variables to search. If the current project contains more than one document variable, you will have a choice of selecting either one or a combination of them. By default, all document variables are selected. To restrict the analysis to only a few of them, click the down arrow key at the right of the list box. You will be presented with a list of all available document variables. Select the variables on which you want the search to be performed.

The **SEARCH UNIT** option determines the search unit on which the search will be performed as well as what will be retrieved. You can select three different search units:

- When selecting **Paragraphs** as the search unit, QDA Miner will return any paragraph meeting the search condition.
- Select **Sentences** to instruct QDA Miner to return sentences meeting the search condition.
- To perform the search, click the  button. The results of a search are displayed in a table located on the **Search Hits** page.

To remove a search hit from the hit list:

- Select its row and then click the  button.

To assign a code to a specific search hit:

- In the table of search hits, select the row corresponding to the text segment you want to code.
- Use the **CODE** drop-down list located above this table to select the code you want to assign.
- Click the  button to assign the selected code to the highlighted text segment.

To assign a code to all search hits:

- Use the **CODE** drop-down list located above this table to select the code that you want to assign.
- Click the  button to assign the selected code to all text segments meeting the search expression.
- Prior to the assignment of a code to all search hits, you may want to remove selected hits that do not correspond to what you were looking for. To remove a search hit from the list, select its row and then click the  button.

To create a report of retrieved segments:

- Click the  button. The sort order of the current table is used to determine the display order in the report. This report is displayed in a text-editing dialog box and may be modified, stored on disk (in RTF, HTML or plain text format), printed, or cut-and-pasted into another application. Graphics and tables may also be inserted anywhere in this report.

To compute a word frequency analysis on the retrieved text segments:

- Click the  button.

For more information on this feature, see [Word Frequency Analysis](#).

To display the automatic text classification panel:

- Click the  button. A panel will appear at the bottom of this hit list, allowing you to apply an automatic text classification model on the retrieved text segments. Clicking this button again, will hide the panel.

For more information on this feature, see [Automatic Text Classification](#).

To analyze the text of all retrieved segments using WordStat:

- Click the  button. QDA Miner will minimize itself and run WordStat, allowing you to perform a quantitative content analysis or apply text-mining techniques on the retrieved text segments. WordStat will also allow you to perform keyword comparisons across any other column in the table. To include additional data for comparison analysis, use the **Add Variables** option.

To display the coding table:

- Click the  button. A dialog box will appear allowing you to code retrieved text segments using drag and drop operations, remove existing codings and attach comments to codes.

For more information on this feature, see [Coding Text Segments Using the Coding Table](#).

To append a copy of the table in the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.
- To append only a single hit from the table, select the row containing the text segment you want to append to the Report Manager and click the  button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear.
- In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV), and Stata data file (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.
- Type a valid file name with the proper file extension.
- Click the **Save** button.

To print the table:

- Click the  button.

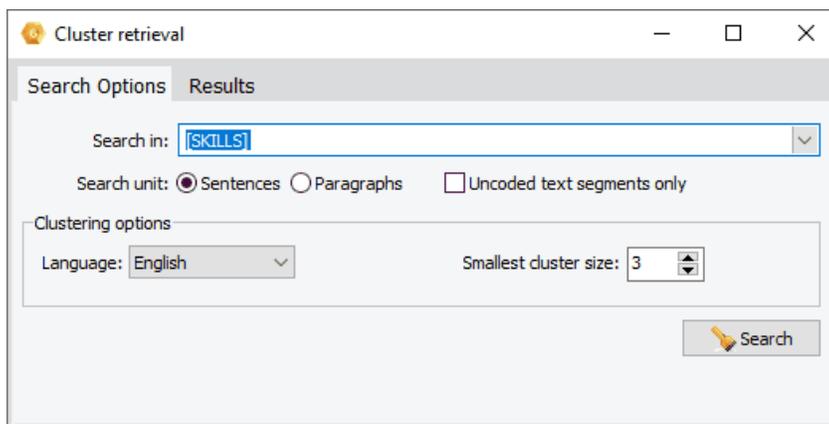
Cluster Extraction

The **CLUSTER EXTRACTION** tool is a unique retrieval feature that allows you to quickly identify all similar paragraphs or sentences in a large collection of documents. This tool relies on a patent-pending algorithm that can quickly compare up to 32,000 text segments and group the most similar ones into clusters. The number of items that may be clustered depends on the amount of memory available. If all extracted segments cannot fit into memory, QDA Miner will offer the possibility to select a random sample to be clustered. The grouping performed is resistant to spelling errors and may also bring together various inflected forms of nouns and verbs. Once computed, clusters of items may then be coded or modified using intuitive drag-and-drop operations. Un-clustered items will also be suggested based on their level of similarity to existing clusters.

Such a tool can speed up the coding process of large quantities of open-ended responses, Twitter feeds or short comments by a factor that may vary from two to 50 times faster or more, compared to what someone would achieve by manually coding those responses one at a time.

To start the clustering process:

- Select the **CLUSTER EXTRACTION** command from the **RETRIEVE** menu. The following dialog box will appear:



Search in: This option allows you to specify which document variables to search. If the current project contains more than one document variable, you will have a choice of selecting either one or more, or a combination of them. To select different document variables, click the Down arrow at the right of the list box. You will be presented with a list of all available variables. Select the desired document variables.

Search unit: This option determines the search unit on which the clustering will be performed as well as what will be retrieved. You can select two different search units:

Paragraphs, where QDA Miner will cluster all paragraphs meeting the search condition, and

Sentences, to instruct QDA Miner to select sentences meeting the search condition.

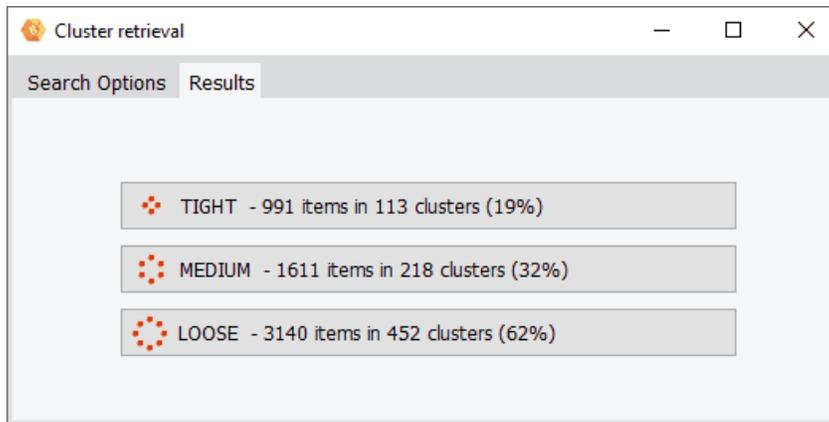
You may restrict the retrieved text segments to those that have not been previously coded by enabling the **Uncoded Text Segment Only** check box.

Language: This option instructs the program to optimize the clustering by taking into account some linguistic features of the language used in the project documents. If the language used is not on the list, simply set this option to **<none>**.

Smallest Cluster Size: This option may be used to specify the minimum number of items that should be clustered together in order to be retrieved and displayed. The minimum value for this

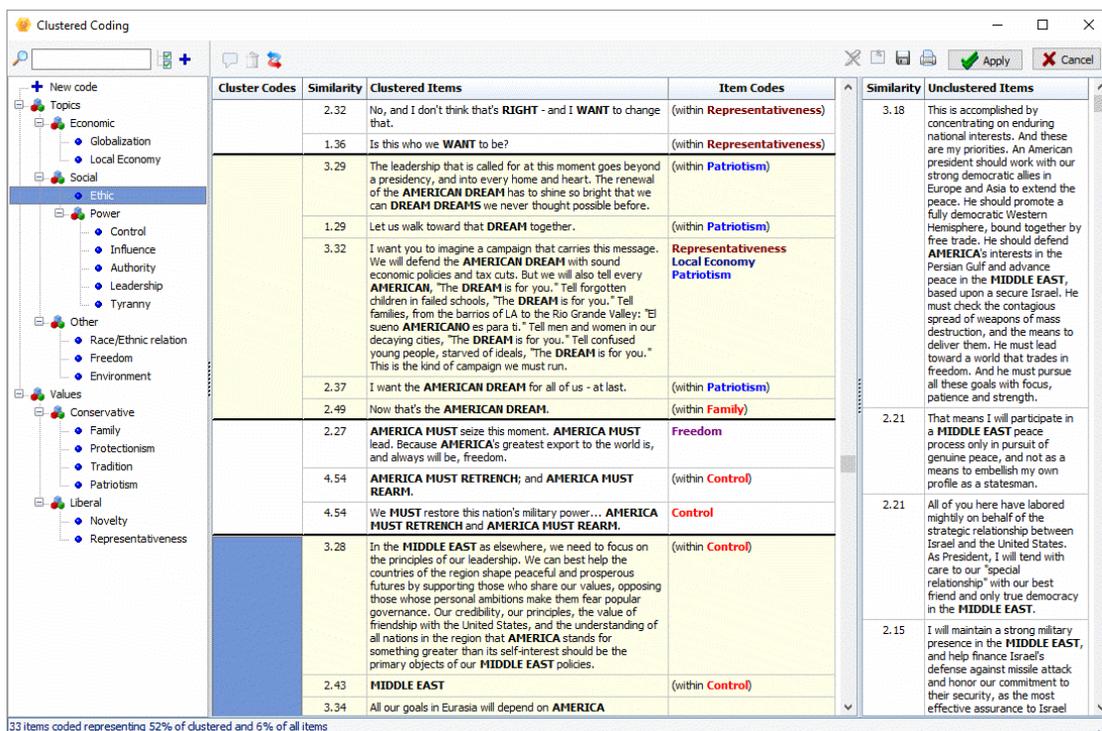
option is 2. Increasing this numeric value reduces the number of clusters retrieved, but allows you to focus on the groups of items that are the most frequent.

- When clicking the  button, the software splits long documents into either paragraphs or sentences and compares all extracted text segments to each other and then groups together those that are the most similar. It then displays a **Results** page (offering a choice between three solutions) that looks like this:



The **Tight** cluster shows only clusters of items that are very similar to each other. In the above example, such a solution grouped 1643 items into 115 clusters, representing 19 percent of all items searched. Choosing the **Loose** option typically shows a larger number of items grouped into clusters containing less similar items. In the above example, a total of 4687 items grouped into 713 clusters were found, representing 54 percent of all extracted text segments. The **Medium** button gives access to an intermediary solution.

- Clicking any one of these buttons presents a coding dialog box similar to this one, allowing you to code and modify a chosen solution:



The dialog box shown above is the main coding tool. It provides numerous possibilities to adjust clusters by adding or removing some text segments, assigning codes to whole clusters or single segments, creating new codes, attaching comments, etc.

The following section provides a detailed description of this dialog box and its different sections:

The **left panel** contains all existing codes that may be assigned to clusters and individual items.

The **middle panel** contains a large table where all clusters of text segments are displayed. Clusters are delineated by thick horizontal lines that spread across the entire table, while the text segments they contain are delineated by thinner lines, spreading from the second column up to the right edge of the spreadsheet. This table contains four columns:

Column 1 is where codes that apply to the entire cluster can be stored.

Column 2 displays a numerical value that indicates how similar the text segment in this row is to the other text segments in the same cluster. The higher the score, the more representative the associated text segment is to its cluster.

Column 3 contains the text of the clustered item. Keywords that are shared by most of the cluster are in uppercase and bold characters. Related words, including different inflections as well as misspellings, are also highlighted in red.

Column 4 is a placeholder where codes associated to a single item can be viewed or stored.

The **right panel** displays a table containing all unclustered items that share some similarities to the currently selected cluster. Like clustered items in the main table, keywords are highlighted. A score displayed on the left of the text segment indicates its level of similarity with items in the selected cluster. Those suggested unclustered items are sorted in descending order of similarity.

- Changes made using the coding table are not implemented immediately but are kept in memory. To implement all changes made, click the  button. It is recommended to click this button regularly after making several changes. To close the dialog box and cancel all changes, click the  button.

Cluster Editing and Coding Operations

To remove an item from its cluster:

- Select the item to be removed then perform one of the following four actions:
 1. Drag and drop the selected row into the unclustered items section
 2. Right-click and select the **REMOVE** command.
 3. Click the  button located in the top tool bar.
 4. Press the **Ctrl-R** key combination.

To add an unclustered item to a cluster:

- Select the unclustered items and then perform one of the following actions:
 1. Drag them to the destination cluster.
 2. Right-click and select **MOVE TO CLUSTER**.

3. Press the **Ctrl-M** key combination.

Suggested unclustered items are displayed in descending order of similarity to the selected cluster. For this reason, QDA Miner expects the dragged items to be dropped into this selected cluster. If the item is dropped into another cluster, the software will ask you to confirm this move to another cluster.

To move a clustered item to a different cluster:

- Select the row to be moved.
- Drag and drop it anywhere in the new cluster.

To split a cluster in two:

Sometimes, a cluster contains items that are related to two different topics and need to be coded separately. Because of the hierarchical clustering process, items related to a single topic are often near each other. To split a cluster:

- Select the row where the cluster should be split.
- Right-click then select either the **SPLIT ABOVE** or **SPLIT BELOW** command.

To merge two clusters:

- Select the first column of the cluster.
- Drag and drop it anywhere on top of the second cluster.

Merging to an adjacent cluster can also be performed by right-clicking to display a pop-up menu and selecting the **MERGE WITH PRIOR** or **MERGE WITH NEXT** command. When codes have been associated with either one or both of the clusters, the resulting cluster inherits all the codes.

To assign a code to a cluster:

- Select the code in the left panel and drop it anywhere in the first column of the cluster to be coded.

or

- Select the first column of the cluster to be coded, drag it toward the left panel and drop it on the desired code.

To assign a code to a single text segment:

- Select the code in the left panel and drop it in the corresponding row (anywhere from the second to the fourth column)

or

- Select the row containing the item to be coded, drag it to the left panel and drop it over the appropriate code.

To assign a new code to a cluster or segment:

- Drag the selected cluster or text segment to be coded toward the left panel and drop it on the **NEW CODE** item located at the top of the section or right-click and choose the **ADD TO A NEW CODE** command. A code editing box will be displayed with a suggested name.
- Edit the suggested name or type a new name, then click the **OK** button.
Alternatively, you may create the code beforehand by clicking the **+** button and then use previously described methods for assigning existing codes to clusters or single text segments.

To remove an existing code:

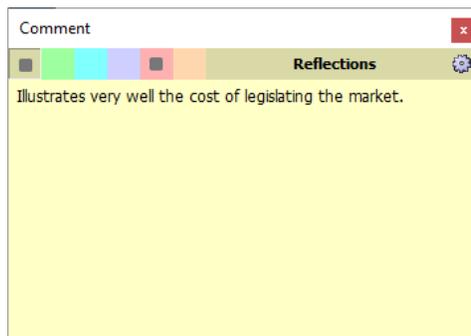
- Select the text segment or cluster containing the code you would like to remove.
- Click the  button located in the toolbar or right-click and select REMOVE. A list of all codes assigned to the current row or cluster will be displayed.
- Select the code that you would like to remove.

To assign or remove codes using check marks:

- Click the  button to display check boxes.
- Select the text segment or the cluster you would like to code.
- Click the check boxes beside the codes you would like to assign to the selected row or cluster, or clear any existing check marks beside codes you would like to remove.

To attach a comment to a coded segment or edit an existing one:

- Click the  button.
- Select the code to which you want to attach a comment. A small window like this will appear:



- Enter the text that you want to associate with the selected code, or edit the existing text.
- Click the **X** button in the upper-right corner to save the comment and to close the window.

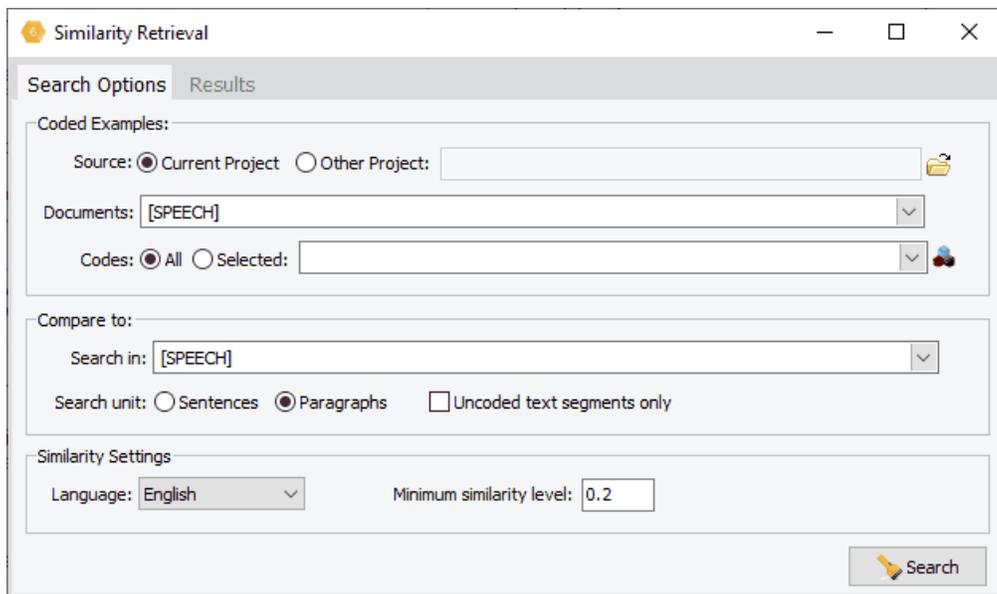
When a note has been assigned to a coded segment, an exclamation point between square brackets is displayed on the left of the code name. To edit an existing comment, follow the above steps. To remove a comment, simply open the Note Editor and delete all text in the editing window.

Code Similarity Retrieval

The Code Similarity tool allows you to quickly identify sentences or paragraphs that share some similarities with existing coded segments in the current project or those stored in another coded project. Such a tool is especially useful on partially coded projects to quickly identify and code text segments in uncoded documents. It may also be useful to improve the consistency of the coding on fully coded projects by identifying items that may have been overlooked. You may also recall all coding performed on another project and identify sentences or paragraphs that are similar to coded segments in this other project, whether or not the associated code exists in the current one. Using an external project as a reference set is especially appropriate when both projects contain similar types of documents to be coded in a similar way.

To use this feature:

- Run the **CODE SIMILARITY** command from the **RETRIEVE** menu. A dialog box similar to this one will appear:



Source: This option allows you to specify whether the coded examples are in the **Current Project** or consist of coded segments stored in another project. When **Other Project** is selected, an **Open File** dialog box appears, allowing you to browse through your computer to choose another project. The external project may later be changed by clicking the  button and choosing another project file.

Document: This option allows you to specify which document variables to search. If the selected project contains more than one document variable, you will have a choice of selecting one or a combination of more than one of them. To select different document variables, click the down arrow at the right of the list box. A list of all available variables will be displayed. Select the document variables on which you want the search to be performed.

Search unit: This option determines the search unit on which the clustering will be performed as well as what will be retrieved. You can select two different search units:

Paragraphs where QDA Miner will extract all paragraphs in the current project; and

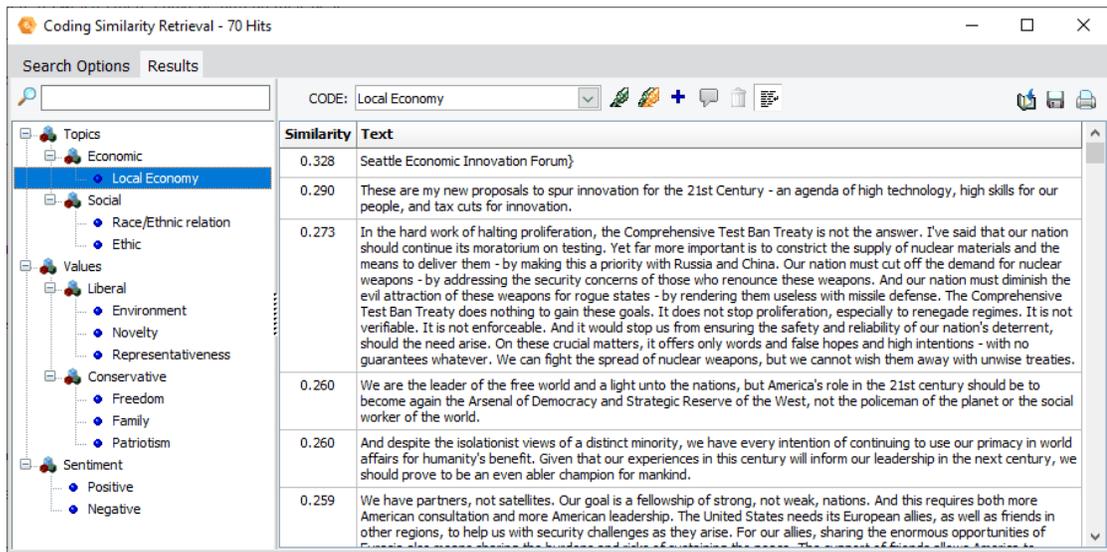
Sentences where QDA Miner will extract sentences rather than paragraphs.

You may restrict the retrieved text segments to those that have not been previously coded by enabling the **Uncoded Text Segment Only** check box.

Language: This option instructs the program to optimize the code similarity search by taking into account some linguistic features used in the project documents. If the language used is not on the list, simply set this option to **<none>**.

Minimum Similarity Level: This option can be used to restrict the display of items to text segments with a similarity value equal to or above the specified value. The similarity score may vary from 0, when items are totally different, to 1 when segments are identical. The lowest value that may be set for this option is 0.1.

- Once the appropriate options have been set, click the  button. QDA Miner will retrieve all coded segments, index those and then retrieve and compare all those to extract text segments. Once completed, QDA Miner will display the results in a dialog box similar to this one:



Shown on the left of the dialog box is the list of all codes in the current or in the other project. In the table to the right is the list of all extracted segments that are somewhat similar to the selected code, shown in descending order of similarity. The similarity scores vary between zero and one. Only those scores meeting the **Minimum Similarity Level** option are displayed.

- To display text segments similar to another code, simply select this new code from the left panel.

To remove a search hit from the hit list:

- Select its row and then click the  button.

To assign a code to a specific search hit:

- In the table of search hits, select the row corresponding to the text segment you want to code.
- Use the **CODE** drop-down list located above this table to select the code you want to assign.
- Click the  button to assign the selected code to the highlighted text segment.

To assign a code to all search hits:

- Use the **CODE** drop-down list located above this table to select the code that you want to assign.

- Click the  button to assign the selected code to all text segments meeting the search expression.
- Prior to the assignment of a code to all search hits, you may want to remove selected hits that do not correspond to what you were looking for. To remove a search hit from the list, select its row and then click the  button.

To append a copy of the table in the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.
- To append only a single hit from the table, select the row containing the text segment you want to append to the Report Manager and click the  button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear.
- In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV), and Stata data file (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.
- Type a valid file name with the proper file extension.
- Click the **Save** button.

To print the table:

- Click the  button.

Query by Example

The **QUERY BY EXAMPLE** search tool is an alternative to a keyword-based search. Rather than specifying a long list of keywords joined by Boolean operators, this query method looks for documents or text segments similar to a given example and presents them in an initial list of search hits in descending order of similarity. The user then marks specific items as relevant or irrelevant and then performs a new search. The system adjusts the initial query by taking into account the provided relevance information and often provides better search results. After a single or a few iterations, the user can then select relevant items for further processing.

QDA Miner's Query by Example feature allows you to provide as the starting example, a typed text consisting of a sample paragraph or sentence, a list of words or phrases, a selected text segment, or even all text segments in the current or in another project currently associated with one or several codes.

To start the query by example search process:

- Select the **QUERY BY EXAMPLE** command from the **RETRIEVE** menu. The following dialog box will appear:

Query by example - Search Criterion

Search Criterion Search Results Selected Hits

Retrieve

Unit: Paragraphs In: [SPEECH]

Starting Example:

Sample text Coded segments Other project:

We must restore the nation's military power

Options

Fuzzy string matching

Do not retrieve already tagged segments

Minimum criteria: 0.001 Maximum suggestions: 200

Language: English

Add variables:

Search

Another way to initiate the **QUERY BY EXAMPLE** feature is to highlight a text segment in the main text editor, right-click and select the **FIND SIMILAR** command from the menu. You will be presented with a submenu allowing you to search for similar **sentences**, **paragraphs** or **documents**. Selecting any one of the three units will automatically start a search and display the **Search Results** tab of the **Query by example** dialog box. Selecting the **OPTIONS** command will bring you to the first tab of the dialog box, **Search Criterion**, and allow you to adjust the various search options.

Search Criterion

Unit: This option determines the search unit on which the search will be performed as well as what will be retrieved. You can select three different search units:

Documents: QDA Miner will apply the search expression on each document associated with a specific case. If a specific document meets the search condition, its location will be returned.

Paragraphs: QDA Miner will return any paragraph meeting the search condition.

Sentences: QDA Miner to return sentences meeting the search condition.

In: This option allows you to specify on which document variables the search will be performed. If the current project contains more than one document variable, you will have a choice of selecting either one or a combination of them. By default, all document variables are selected. To restrict the analysis to only a few of them, click the down arrow key to the right of the list box. You will be presented with a list of all available document variables. Select the variables on which you want the search to be performed.

The **Starting Example** section allows you to choose whether the starting example will be:

Sample text: Text typed or pasted from the clipboard in an edit box.

Coded Segments: Based on existing coded segments associated with one or several codes from within the project.

Other projects: Based on coded segments from another project.

When the last two options are chosen, two lists of codes are displayed. The **Examples** list lets you select one or several codes whose segments will be used as the starting examples on which the search for similar segments will be based. The **Non-Examples** list may be used to indicate coded segments that do not correspond to what you are looking for. This second set of coded segments allows the program to focus more precisely on items similar to the starting examples.

Fuzzy string matching: This option allows you to match documents even if they do not necessarily share the exact same relevant words. Computation of similarity is normally achieved by looking at shared words and requires exact matches of those words. Such an approach can perform poorly on documents containing misspelled words and may also fail to retrieve relevant documents using slightly different word forms. If the starting example has the word "aggression", QDA Miner may fail to match text segments containing words like "aggressive" or "aggressiveness" and will also fail to match other segments containing misspelled forms such as "agression". Enabling the **fuzzy string matching** algorithm relaxes the matching condition for words and retrieves more text segments than are likely to be relevant. Please note, however, that this option may also increase the number of irrelevant results retrieved.

Do not retrieve already tagged segments: When searching sentences or paragraphs, this option restricts the retrieved text segments to those that have not been previously coded. Such an option is especially useful when you are attempting to find, among uncoded text segments those that are similar to existing coded segments and that could potentially receive the same code.

Minimum criteria: A similarity score is computed for each retrieved segment. This score varies between 0.0 for totally different segments to 1.0 for segments identical to the starting example. This option allows you to set a minimum value for this similarity score. In order for a text segment to be retrieved and displayed, it should obtain a similarity score equal to or higher than this minimum value. By default, this option is set to 0.001.

Maximum hits: This option allows you to restrict the number of retrieved segments to a specified number. By default, up to 200 items are retrieved.

Language: This option instructs the program to optimize the search query by taking into account some linguistic features of the language used in the project documents. If the language used is not on the list, simply set this option to **<none>**.

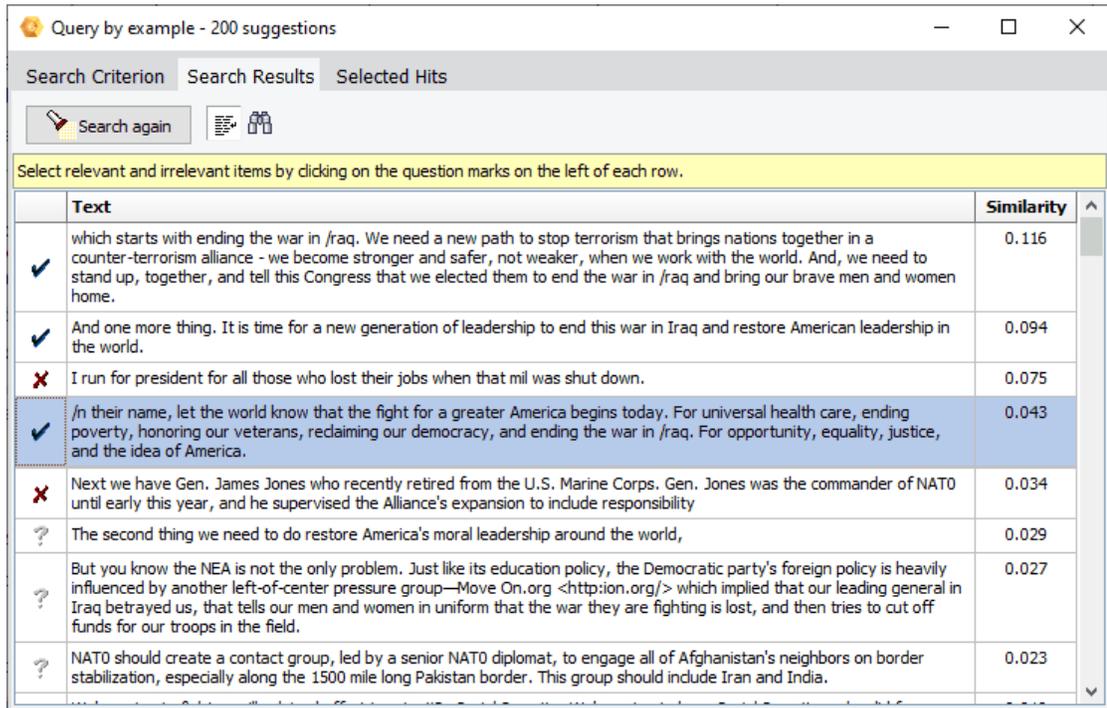
Add variables: This drop-down checklist box may optionally be used to add values stored in one or

more variable to the table of retrieved segments.

- To perform the search, click the  button. The results of a search are displayed in a table located on the **Search Results** tab.

Search Results

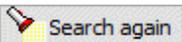
- Select the **Search Results** tab to see the table of results generated by your query.



Select relevant and irrelevant items by clicking on the question marks on the left of each row.

| | Text | Similarity | |
|---|---|------------|--|
| ✓ | which starts with ending the war in /Iraq. We need a new path to stop terrorism that brings nations together in a counter-terrorism alliance - we become stronger and safer, not weaker, when we work with the world. And, we need to stand up, together, and tell this Congress that we elected them to end the war in /Iraq and bring our brave men and women home. | 0.116 | |
| ✓ | And one more thing. It is time for a new generation of leadership to end this war in Iraq and restore American leadership in the world. | 0.094 | |
| ✗ | I run for president for all those who lost their jobs when that mil was shut down. | 0.075 | |
| ✓ | /n their name, let the world know that the fight for a greater America begins today. For universal health care, ending poverty, honoring our veterans, reclaiming our democracy, and ending the war in /Iraq. For opportunity, equality, justice, and the idea of America. | 0.043 | |
| ✗ | Next we have Gen. James Jones who recently retired from the U.S. Marine Corps. Gen. Jones was the commander of NATO until early this year, and he supervised the Alliance's expansion to include responsibility | 0.034 | |
| ? | The second thing we need to do restore America's moral leadership around the world, | 0.029 | |
| ? | But you know the NEA is not the only problem. Just like its education policy, the Democratic party's foreign policy is heavily influenced by another left-of-center pressure group—Move On.org <http://ion.org/> which implied that our leading general in Iraq betrayed us, that tells our men and women in uniform that the war they are fighting is lost, and then tries to cut off funds for our troops in the field. | 0.027 | |
| ? | NATO should create a contact group, led by a senior NATO diplomat, to engage all of Afghanistan's neighbors on border stabilization, especially along the 1500 mile long Pakistan border. This group should include Iran and India. | 0.023 | |

All results are presented in a list in descending order of similarity. This table is used to select relevant items for further processing or to improve the query results by providing relevance feedback. Initially, all items are marked with a question mark (?) icon on the far left side. Clicking it once changes the question mark into a check mark (✓) indicating that this item is relevant. Using this check mark selects it for further processing. Clicking it again changes it to a ✗ mark which indicates that this result is not relevant and that further queries should ignore items like this one. Clicking it again will change it back to the question mark.

Once a few relevant and non-relevant items have been marked, clicking the  button performs another search and attempts to retrieve more relevant items. After one or more iterations, you will find that no significant improvement is made by providing additional feedback. When this occurs, examine entries on the list and make sure a green check mark appears beside relevant ones. Then move to the **Selected Hits** tab.

Selected Hits

- Select the **Selected Hits** tab to see the table of hits a list of each text segment or document that was tagged as relevant in the **Search Results** page.

Query by example - 200 suggestions

Search Criterion Search Results Selected Hits

Search again

Select relevant and irrelevant items by clicking on the question marks on the left of each row.

| | Text | Similarity |
|---|---|------------|
| ✓ | which starts with ending the war in /Iraq. We need a new path to stop terrorism that brings nations together in a counter-terrorism alliance - we become stronger and safer, not weaker, when we work with the world. And, we need to stand up, together, and tell this Congress that we elected them to end the war in /Iraq and bring our brave men and women home. | 0.116 |
| ✓ | And one more thing. It is time for a new generation of leadership to end this war in Iraq and restore American leadership in the world. | 0.094 |
| ✗ | I run for president for all those who lost their jobs when that mil was shut down. | 0.075 |
| ✓ | /In their name, let the world know that the fight for a greater America begins today. For universal health care, ending poverty, honoring our veterans, reclaiming our democracy, and ending the war in /Iraq. For opportunity, equality, justice, and the idea of America. | 0.043 |
| ✗ | Next we have Gen. James Jones who recently retired from the U.S. Marine Corps. Gen. Jones was the commander of NATO until early this year, and he supervised the Alliance's expansion to include responsibility | 0.034 |
| ? | The second thing we need to do restore America's moral leadership around the world, | 0.029 |
| ? | But you know the NEA is not the only problem. Just like its education policy, the Democratic party's foreign policy is heavily influenced by another left-of-center pressure group—Move On.org <http://ion.org/> which implied that our leading general in Iraq betrayed us, that tells our men and women in uniform that the war they are fighting is lost, and then tries to cut off funds for our troops in the field. | 0.027 |
| ? | NATO should create a contact group, led by a senior NATO diplomat, to engage all of Afghanistan's neighbors on border stabilization, especially along the 1500 mile long Pakistan border. This group should include Iran and India. | 0.023 |

This list includes additional information such as the case number and case label, as well as the document variable in which it was found, the hit location, etc. To sort this list of hits in ascending order on any column values, simply click the column header. Clicking a second time sorts the rows again in descending order.

Selecting an item in this table, either by clicking it or by using the **Up** or **Down** arrow keys on the keyboard, automatically displays the corresponding case and document in the main window. If the search unit was set to **Paragraphs or Coded Segments**, selecting a specific hit will also highlight the corresponding text segment. This feature provides a way to examine the retrieved segment in its surrounding context. You can also assign an existing code to the highlighted segment.

To assign a code to a specific search hit:

- In the table of search hits, select the row corresponding to the text segment you want to code.
- Use the **CODE** drop-down list located above this table to select the code you want to assign.
- Click the  button to assign the selected code to the highlighted text segment.

To assign a code to all search hits:

- Use the **CODE** drop-down list located above this table to select the code that you want to assign.
- Click the  button to assign the selected code to all text segments meeting the search expression.
- Prior to the assignment of a code to all search hits, you may want to remove selected hits that do not correspond to what you were looking for. To remove a search hit from the list, select its row and then click the  button.

To display the automatic text classification panel:

- Click the  button. A panel will appear at the bottom of this hit list, allowing you to apply an automatic text classification model on the retrieved text segments. Clicking this button again, will hide the panel.

For more information on this feature, see [Automatic Text Classification](#).

To analyze the text of all retrieved segments using WordStat:

- Click the  button. QDA Miner will minimize itself and run WordStat, allowing you to perform a quantitative content analysis or apply text-mining techniques on the retrieved text segments. WordStat will also allow you to perform keyword comparisons across any other column in the table. To include additional data for comparison analysis, use the **Add Variables** option.

To display the coding table:

- Click the  button. A dialog box will appear allowing you to code retrieved text segments using drag and drop operations, remove existing codings and attach comments to codes.

For more information on this feature, see [Coding Text Segments Using the Coding Table](#).

To append a copy of the table in the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.
- To append only a single hit from the table, select the row containing the text segment you want to append to the Report Manager and click the  button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear.
- In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV), and Stata data file (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.
- Type a valid file name with the proper file extension.
- Click the **Save** button.

To print the table:

- Click the  button.

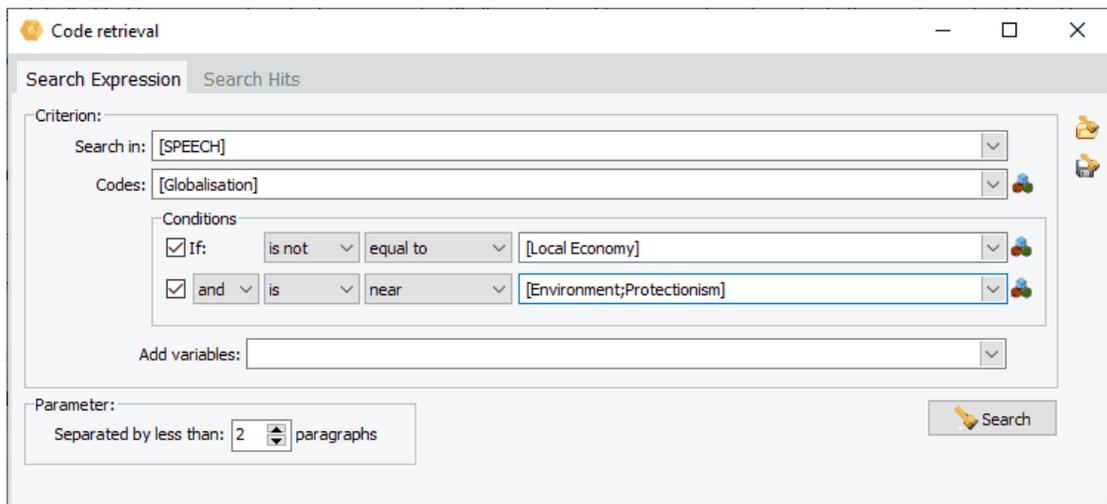
Coding Retrieval

The **CODING RETRIEVAL** feature lists all text segments associated with chosen codes or patterns of codes. Coded segments corresponding to the search criteria are returned in a table on the **Search Hits** tab. This table may be printed or saved to disk. It may also be used to create tabular or text reports as well as to assign new codes to the retrieved segments.

Performing a Code Retrieval

To start the code retrieval feature:

- Select the **CODING RETRIEVAL** command from the **RETRIEVE** menu. The following dialog box will appear:



Search in: This option allows you to specify on which document variables the search may be performed. If the current project contains more than one document variable, you will have a choice of selecting either one or a combination of them. By default, all document variables are selected. To restrict the analysis to only a few of them, click the down arrow key at the right of the list box. You will be presented with a list of all available document variables. Select the variables on which you want the search to be performed.

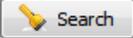
Codes: This option allows you to select one or more codes to be retrieved. You can select the codes either from a drop-down checklist by clicking the arrow button or from a tree representation of the codebook by clicking the  button.

Add variables: This drop-down checklist box may optionally be used to add the values stored in one or more variables to the table of retrieved segments for the specific case from which a text segment originates. This feature is especially useful for comparing differences in how codes are used or how specific topics are expressed by different groups of individuals. It may also be used to examine the relationship between these values and the codes.

To perform a simple code retrieval:

Only the first two options at the top of this dialog box need to be set in order to retrieve coded segments associated with some codes.

- Set the **Search in** option to specify on which document variables the search may be performed.
- Set the **Codes** option to specify the codes to be retrieved.

- Once the options have been set properly, simply click the  button to retrieve the selected codes.
- To store the search expression and options, click the  button and specify the name under which those query options will be saved.
- To retrieve a previously saved query, click the  button and select from the displayed list the name of the query you would like to retrieve (for more information, see [Saving and Retrieving Queries](#)).

To perform a complex code retrieval:

QDA Miner can also search for more complex code patterns by providing the option of setting up to two criteria specifying the spatial relationship between the codes. The combination of codes can be defined using one of seven logical operators. The table below provides the list of the available logical conditions that may be used to characterize the code combination. In this table, Coding A refers to the coded segments that will be retrieved while Coding B refers to the coded segments based on which the condition will be tested. Please note that the reverse of these functions may also be obtained by using a negation operator (see below).

| Function | Description |
|--------------------|--|
| Equal to | Coding A will be retrieved if it points to the same text segment as Coding B. |
| Enclosing | Coding A will be retrieved its text segment entirely enclosed another coded segment assigned to B. |
| Included in | Coding A will be retrieved if its text segment is entirely surrounded by another text segment assigned to B. |
| Overlapping | Code A will be retrieved if its text segment completely or partially overlaps another coded segment assigned to B. |
| Followed by | Coding A will be retrieved if followed by a text segment assigned to B. The two segments should not overlap and the distance separating the two segments should be less than a user specified distance. |
| Preceded by | Coding A will be retrieved if it follows a text segment assigned to B. The two segments should not overlap and the distance separating the two segments should be less than a user specified distance. |
| Near | Coding A will be retrieved if it follows or precedes a text segment assigned to B. The two segments should not overlap and the distance separating the two segments should be less than a user specified distance. |

Three list boxes are used to set a retrieval condition:

The first list box: It is used to specify whether to include or exclude the coded segments meeting the specified criterion. Setting this list box to **Is** will retrieve any segments meeting the specified criterion, while setting it to **Is Not** will exclude these segments and retrieve only those that do not meet the criterion.

The second list box: It allows you to choose the logical function that will be applied (see above for the list of logical functions). If one of the last three functions is selected (i.e., followed by, preceded by, or near) a new option will be displayed at the bottom of the dialog box. This new option allows you to set what should be the maximum distance, in number of paragraphs, separating the two codes.

The third list box: It is used to select the codes based on which the condition will be tested. If several

codes are specified either in the list of codes to be retrieved or in this third list box, they will be treated as if they were joined by the **OR** Boolean operator. In other words, the condition will be met if any combination of codes is encountered. For example, searching for codes A and B to the condition that they must be equal to the list of codes C, D and E corresponds to the following formula:

(A or B) is equal to (C or D or E)

Up to two retrieval conditions may be set and combined using a Boolean operator. If the **AND** operator is used, then only these segments meeting both criteria will be retrieved while selecting the **OR** operator will retrieve any segment meeting at least one of these two criteria.

For example, in the dialog box above, QDA Miner will retrieve any text segments coded as *Globalization* if this segment is within two paragraphs of another text segment coded as *Environment* or *Protectionism* and if this text segment is not also coded as *Local Economy*.

Working with the Retrieved Segments

- Select the **Search Hits** tab to see the table of retrieved codes.

| Category | Code | Case | Text | Coder | Date | Words | % Words | Comment |
|----------|---------------|-------------------------|--|-------|------------|-------|---------|------------------|
| Economic | Local Economy | Buchanan - Announcement | With each year, America becomes ever more addicted to the narcotic of cheap | Admin | 2020-07-10 | 71 | 3.2% | Reflections: df |
| Economic | Local Economy | Buchanan - Announcement | It is not an accident. It is a direct consequence of a deliberate effort to submerge | Admin | 2005-07-24 | 175 | 8.0% | REFLECTIONS: S |
| Economic | Local Economy | Buchanan - Announcement | NAFTA and GATT have bequeathed us a trillion-dollar merchandise trade deficit. | Admin | 2005-07-24 | 125 | 5.7% | |
| Economic | Local Economy | Buchanan - Announcement | One of the great achievements of the Republican Congress was balancing the | Admin | 2005-07-24 | 50 | 2.3% | Reflections: I h |
| Economic | Local Economy | Bush - Foreign Policy | Some have tried to pose a choice between American ideals and American | Admin | 2005-07-25 | 103 | 2.5% | |
| Economic | Local Economy | Bush - Foreign Policy | This is accomplished by concentrating on enduring national interests. And these | Admin | 2005-07-25 | 106 | 2.5% | |
| Economic | Local Economy | Bush - Foreign Policy | Today I want to talk about Europe and Asia... the world's strategic heartland... our | Admin | 2020-06-20 | 42 | 1.0% | |
| Economic | Local Economy | Bush - Foreign Policy | The Eurasian landmass, in our century, has seen the indignities of colonialism and | Admin | 2005-07-25 | 54 | 1.3% | |
| Economic | Local Economy | Bush - Foreign Policy | We must show American power and purpose in strong support for our Asian | Admin | 2020-06-20 | 67 | 1.6% | |
| Economic | Local Economy | Bush - Foreign Policy | We will still, however, need missile defense systems - both theater and national. | Admin | 2020-06-20 | 24 | 0.6% | |
| Economic | Local Economy | Bush - Foreign Policy | For NATO to be strong, cohesive and active, the President must give it consistent | Admin | 2020-06-20 | 36 | 0.9% | |
| Economic | Local Economy | Forbes - Announcement | Take the global economic crisis that's raging around the world. Wherever you look | Admin | 2005-07-24 | 31 | 2.9% | |
| Economic | Local Economy | Forbes - Announcement | We live in a new economic era - we live in a world that's linked together by travel, | Admin | 2005-07-24 | 71 | 6.6% | |
| Economic | Local Economy | Gore - Announcement | Instead of the biggest deficits in history, we now have the biggest surpluses. | Admin | 2005-07-25 | 46 | 3.6% | |
| Economic | Local Economy | Gore - Announcement | I want to keep our economy strong, and I want to do it. I want to do it the | Admin | 2005-07-25 | 370 | 20.0% | |

Beside the text associated with retrieved coded segments, this table also contains the **code** name along with its **category**, the **case** from which this segment originates, the **coder** name and the **date** when it has been assigned. The **Words** column contains the total number of words in the text segment, while the **% Words** column shows the relative importance of this segment versus the entire document, in term of percentage of words. If a **comment** has been assigned to a specific segment, it will also be included in the table. Lastly, values for all variables that you have chosen to add to the table will be listed at the right end of the table.

To sort this list of retrieved segments in ascending order on any column values, simply click this column header. Clicking the same column header a second time sorts the rows again in descending order. Columns may be reordered by dragging and dropping them to the desired location.

Hits tables may be printed, coded, stored as a text report, saved to disk either as a new project or exported in a new file format such as Excel, MS Word, ASCII, HTML, or XML format.

To assign code to a retrieved section:

- In the table of search hits, select the row corresponding to the text segment you want to code.
- Use the **CODE** drop-down list located above this table to select the code you want to assign.

- Click the  button to assign the selected code to the highlighted text segment.

To assign a code to all retrieved sections:

- Use the **CODE** drop-down list located above this table to select the code that you want to assign.
- Click the  button to assign the selected code to all text segments meeting the search expression.
- Prior to the assignment of a code to all search hits, you may want to remove selected hits that do not correspond to what you were looking for. To remove a search hit from the list, select its row and then click the  button.

To display the automatic text classification panel:

- Click the  button. A panel will appear at the bottom of this hit list, allowing you to apply an automatic text classification model on the retrieved text segments. Clicking this button again, will hide the panel.

For more information on this feature, see [Automatic Text Classification](#).

To analyze the text of all retrieved segments using WordStat:

- Click the  button. QDA Miner will minimize itself and run WordStat, allowing you to perform a quantitative content analysis or apply text-mining techniques on the retrieved text segments. WordStat will also allow you to perform keyword comparisons across any other column in the table. To include additional data for comparison analysis, use the **Add Variables** option.

To display the coding table:

- Click the  button. A dialog box will appear allowing you to code retrieved text segments using drag and drop operations, remove existing codings and attach comments to codes.

For more information on this feature, see [Coding Text Segments Using the Coding Table](#).

To create a report of coded segments:

- Click the  button. The sort order of the current table is used to determine the display order in the report. This report is displayed in a text editor dialog box and may be modified, stored on disk in RTF, HTML or plain text format, printed, or cut and pasted into another application. Graphics and tables may also be inserted anywhere in this report.

To export retrieved codes into a new project:

- Click the  button.
- Enter the name of the new project and click the **Save** button.

To append a copy of the table in the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.

- To append only a single hit from the table, select the row containing the text segment you want to append to the Report Manager and click the  button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear.
- In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV), and Stata data file (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.
- Type a valid file name with the proper file extension.
- Click the **Save** button.

The obtained table can also be stored in a new project file, where each row becomes a new case and each column is transformed into a variable. This type of project file may be useful for performing a more detailed analysis of coded segments.

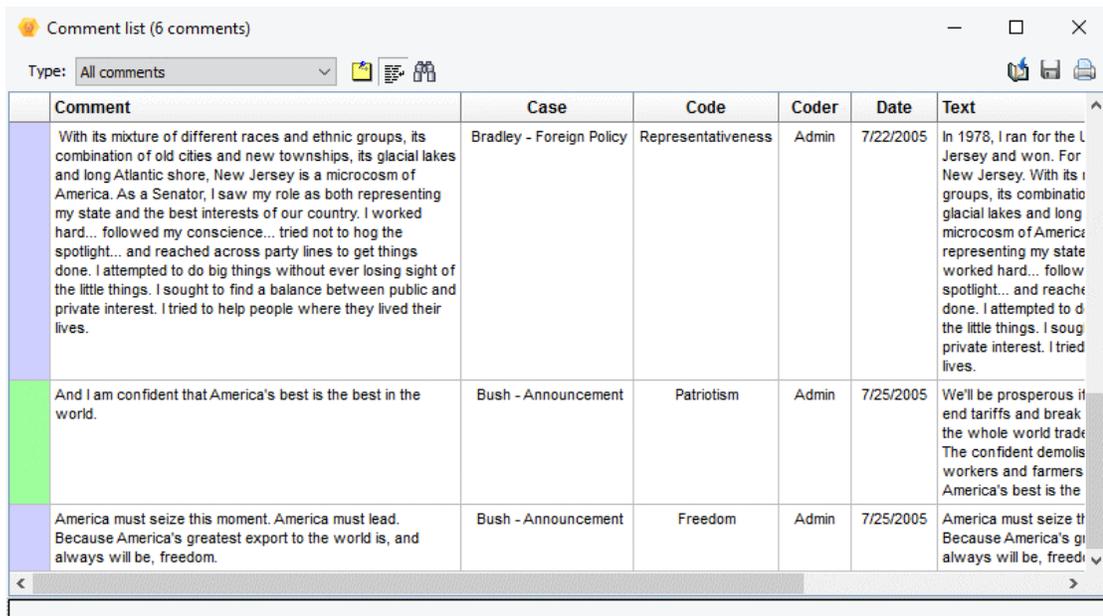
To print the table:

- Click the  button.

Retrieving a List of Comments

To review all comments attached to codings in a project:

- Select the **LIST COMMENTS** command from the **RETRIEVE** menu. A dialog box similar to this one will appear:



| Comment | Case | Code | Coder | Date | Text |
|---|--------------------------|--------------------|-------|-----------|--|
| With its mixture of different races and ethnic groups, its combination of old cities and new townships, its glacial lakes and long Atlantic shore, New Jersey is a microcosm of America. As a Senator, I saw my role as both representing my state and the best interests of our country. I worked hard... followed my conscience... tried not to hog the spotlight... and reached across party lines to get things done. I attempted to do big things without ever losing sight of the little things. I sought to find a balance between public and private interest. I tried to help people where they lived their lives. | Bradley - Foreign Policy | Representativeness | Admin | 7/22/2005 | In 1978, I ran for the U Jersey and won. For New Jersey. With its groups, its combinatio glacial lakes and long microcosm of America: representing my state worked hard... follow spotlight... and reach done. I attempted to d the little things. I soug private interest. I tried lives. |
| And I am confident that America's best is the best in the world. | Bush - Announcement | Patriotism | Admin | 7/25/2005 | We'll be prosperous if end tariffs and break the whole world trade. The confident demolis workers and farmers America's best is the |
| America must seize this moment. America must lead. Because America's greatest export to the world is, and always will be, freedom. | Bush - Announcement | Freedom | Admin | 7/25/2005 | America must seize th Because America's gr always will be, freed |

Selecting an item in this table (either by clicking it or by using the keyboard cursor keys such as

the Up or Down arrow keys) automatically displays the corresponding document in the main window and highlights the corresponding coded segment. This feature provides a way to examine the retrieved segment in its surrounding context. By default, all types of comments are displayed. To display a single type of comment, set the **TYPE** list box to the desired comment type.

To sort this list of retrieved segments in ascending order on any column values, simply click this column header. Clicking the same column header a second time sorts the rows again in descending order. Columns may be reordered by dragging and dropping them to the desired location.

To edit or delete a comment:

- Select the row containing the comment you would like to edit.
- Click the  button and edit the text of the comment. To remove a comment, simply delete all the text.

To append a copy of the table in the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear.
- In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV), and Stata data file (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.
- Type a valid file name with the proper file extension.
- Click the **Save** button.

The obtained table can also be stored in a new project file, where each row becomes a new case and each column is transformed into a variable. This type of project file may be useful for performing a more detailed analysis of coded segments.

To print the table:

- Click the  button.

Link Retrieval

The **LINK RETRIEVAL** feature allows you to obtain a list of all hyperlinks in your project, or restrict this list to specific link types or to those meeting specific conditions. For example, you may retrieve links associated with specific codes, or to those containing some keywords or key phrases in their label or description. You may also filter links for events occurring in a specific time period or associated with a specific geographic region. Items with geographic coordinates may then be exported and viewed in Google Earth or ArcView software (with optional time animation) while time-tagged links may be displayed on an interactive timeline display.

To retrieve a list of hyperlinks:

Choose the **LIST HYPERLINKS** command from the **RETRIEVE** menu. A dialog box similar to this one will appear:

The screenshot shows the 'Link Retrieval' dialog box with the following settings:

- Criterion:** Search Hits
- Retrieve links in:** Document: [SPEECH]; Attached to: Code marks
- Link types:** Geographic location
- Conditions:** Associated with codes: [Ethic;Environment;Justice]; Geographic area within: 100 kilometers from latitude: 5.35 longitude: -0.06; Date and time: After 2011-03-14 9:09:20 PM
- Add to Report:** Coded segment; Comment; Variables: [CANDIDATE]

Document: This option allows you to specify from which document variables to retrieve hyperlinks. If the current project contains more than one document variable, you will have a choice of selecting either one or a combination of them. By default, all document variables are selected. To restrict the analysis to only a few of them, click the Down arrow key at the right of the list box. You will be presented with a list of all available document variables. Select the variables on which you want the search to be performed. One may also retrieve links attached to **Text** segments only, **Code marks** only, or **Both**.

The **Link Type** option box lets you specify which types of links should be retrieved. You may choose any one of the six types available in QDA Miner or a combination thereof.

The **Condition** option box is used to filter links meeting additional conditions. Five types of filters may be applied:

Current case only: This will restrict the retrieval to links associated with documents or images in the current case.

Associated with codes: This condition allows you to restrict the retrieval of links to those attached to specific codes. When this option is chosen, you will be required to click the down arrow key and select the codes from list. These codes can also be selected from a

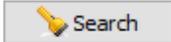
tree representation of the codebook by clicking the  button.

Label or description includes: You may also retrieve only links containing specific keywords or key phrases in their label or description by selecting this box and entering a search term. The **Case Sensitive** option defines whether the search is case sensitive, while the **Whole Word** box allows you to define whether the typed words or phrases can match part words or only whole words.

Geographic area within: Geographic tags make it possible to filter those tags based on their distance from a specific geographic location. To enable this feature, this box should be selected. You then need to specify a geographic point using its latitude and longitude and the distance either in **miles** or in **kilometers** from this location within which the geographic tag should be located. You may click the  button to type the geographic coordinates in degrees, minutes, seconds and cardinal compass point rather than decimal values, or paste the location from Google Earth. You may also import a geographic location from a KMZ or KML file by clicking the  button, or search previously entered or imported ones by clicking the  button.

Date and time: It is possible to filter date and time as well as geographic links with time information by setting this box. You then need to select whether the associated dates should occur **Before**, **After**, or **Between** a specific date-and-time range. In the latter case, two dates need to be provided.

The **Add to Report** section allows you to append to the table of retrieved segments additional information such as the text from the original document associated with this link, any comments attached to the coded segment, or any values stored in one or more variable for the specific case from which the links originate.

- Once the search conditions have been set, click the  button. The results of a search are displayed in a table located on the **Search Hits** page similar to this one:

| Case | Document | Code | Link type | Link/Label | Latitude | Longitude | Date | To Date |
|----------------------------|----------|---------------------|---------------------|--|------------------|-------------------|------------|------------|
| Ted Kaczynski - Early life | DOCUMENT | Born | Geographic Location | Born in Chicago, IL | 41° 51' 0.04" N | 87° 39' 1.10" W | 1942-05-22 | |
| Ted Kaczynski - Early life | DOCUMENT | Academic Career | Geographic Location | Sherman Elementary School | 44° 49' 12.86" N | 91° 33' 8.59" W | 1948-09-01 | 1953-06-24 |
| Ted Kaczynski - Early life | DOCUMENT | Academic Career | Geographic Location | Evergreen Park School District 124 | 41° 43' 20.46" N | 87° 42' 12.15" W | 1953-09-01 | 1957-06-28 |
| Ted Kaczynski - Early life | DOCUMENT | Academic Career | Geographic Location | Evergreen Park Community HS | 41° 42' 46.88" N | 87° 42' 5.20" W | 1955-09-01 | 1958-06-24 |
| Ted Kaczynski - Early life | DOCUMENT | Academic Career | Geographic Location | Harvard University | 42° 22' 39.52" N | 71° 7' 24.55" W | 1958-09-01 | 1962-09-01 |
| Ted Kaczynski - Career | DOCUMENT | Academic Career | Geographic Location | University of Michigan | 42° 18' 2.43" N | 83° 42' 8.97" W | 1962-09-01 | 1967-09-01 |
| Ted Kaczynski - Career | DOCUMENT | Academic Career | Geographic Location | University of California in Berkeley | 37° 52' 13.81" N | 122° 15' 36.37" W | 1967-09-01 | 1969-06-01 |
| Ted Kaczynski - Career | DOCUMENT | Relocation | Geographic Location | Lombard, IL | 41° 52' 48.11" N | 88° 0' 28.24" W | 1971-07-01 | 1973-07-01 |
| Ted Kaczynski - Career | DOCUMENT | Relocation | Geographic Location | Lincoln, MT | 46° 57' 17.78" N | 112° 40' 54.15" W | 1973-09-01 | 1978-09-01 |
| Ted Kaczynski - Bombing | DOCUMENT | Criminal activities | Geographic Location | Northwestern University | 42° 3' 18.86" N | 87° 40' 29.76" W | 1978-05-01 | |
| Ted Kaczynski - Bombing | DOCUMENT | Criminal activities | Geographic Location | Chicago O'Hare International Airport | 41° 58' 35.88" N | 87° 54' 18.76" W | 1978-05-01 | |
| Ted Kaczynski - Bombing | DOCUMENT | Criminal activities | Geographic Location | University of California in Berkeley | 37° 52' 13.81" N | 122° 15' 36.37" W | 1985-05-15 | |
| Ted Kaczynski - Bombing | DOCUMENT | Criminal activities | Geographic Location | Sacramento, CA | 38° 34' 53.66" N | 121° 29' 39.84" W | 1985-12-11 | |
| Ted Kaczynski - Bombing | DOCUMENT | Criminal activities | Geographic Location | Salt Lake City, UT | 40° 45' 38.80" N | 111° 53' 27.77" W | 1987-02-20 | |
| Ted Kaczynski - Bombing | DOCUMENT | Criminal activities | Geographic Location | Yale University New Haven, Connecticut | 41° 18' 19.46" N | 72° 56' 12.68" W | 1993-06-24 | |
| Ted Kaczynski - Bombing | DOCUMENT | Criminal activities | Geographic Location | Tiburon California | 37° 52' 24.74" N | 122° 27' 23.90" W | 1993-06-22 | |
| Ted Kaczynski - Bombing | DOCUMENT | Criminal activities | Geographic Location | Massachusetts Institute of Technology | 42° 21' 28.75" N | 71° 5' 27.33" W | 1995-06-01 | 1995-09-01 |
| Ted Kaczynski - Bombing | DOCUMENT | Criminal activities | Geographic Location | North Caldwell, NJ | 40° 51' 53.36" N | 74° 15' 29.53" W | 1994-12-10 | |

This table is synchronized with the main window, so moving from one row to another will move you to the case and document/image containing the selected link and will highlight the associated text or image area to which the link has been attached, allowing you to access its full context.

To remove a link from the list of hits:

- Click the  button. Removing a link using this method does not delete the link itself but simply

removes the associated row from the list of hits.

To edit a link:

- Click the  button. For more information on editing options, see [Hyperlinking](#).

To delete a link:

- Click the  button. This operation will not only remove the row from the list of hits but will also delete the associated hyperlink.

To create a timeline of links containing date-and-time information:

- Click the  button. For further information on this feature, see [Creating and Editing Timelines](#).

To export all geographic tags to a Google Earth KMZ file:

- Click the  button. For further information on this feature, see [Displaying Geo-Tags in Google Earth](#).

To append a copy of the table in the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear.
- In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV), and Stata data file (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.
- Type a valid file name with the proper file extension.
- Click the **Save** button.

The obtained table can also be stored in a new project file, where each row becomes a new case and each column is transformed into a variable. This type of project file may be useful for performing a more detailed analysis of coded segments.

To print the table:

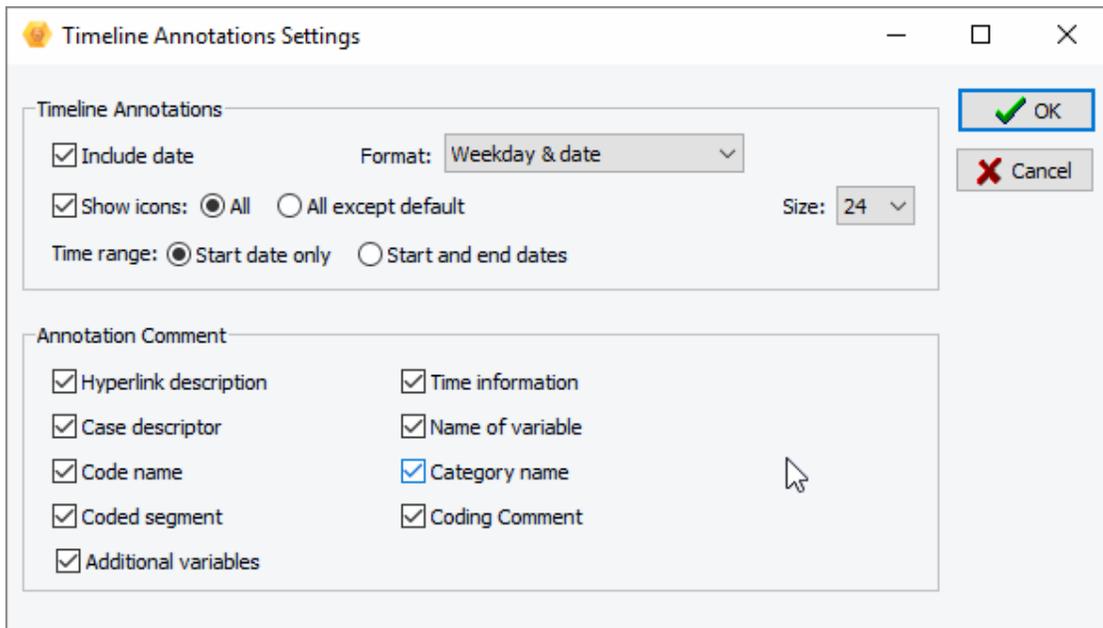
- Click the  button.

Creating and Editing Timelines

QDA Miner allows you to associate date-and-time information to specific text segments or code marks. Since such events may not necessarily be presented chronologically in a project's various documents, the possibility of ordering them can represent a powerful method to identify sequences of related events. A timeline graphic fits this purpose perfectly since it is a visual representation of the sequence of events arranged in chronological order and displayed along a single line.

To create a timeline in QDA Miner, you first need to retrieve links containing time information, by running the **LINK RETRIEVAL** command from the **RETRIEVE** menu. To create a timeline in QDA Miner, you first need to retrieve links containing time information by running the **LINK RETRIEVAL** command from the **RETRIEVE** menu (for further information on how to retrieve those links and on how to apply various filtering criteria, see [Link Retrieval](#)).

- Once links have been retrieved, click the  button located in the upper-right corner of the **Search Hits** tab. A dialog box similar to this one will appear:



A timeline in QDA Miner stores text and graphic information in two different locations: the **Timeline Annotations** and the **Annotation Comments**.

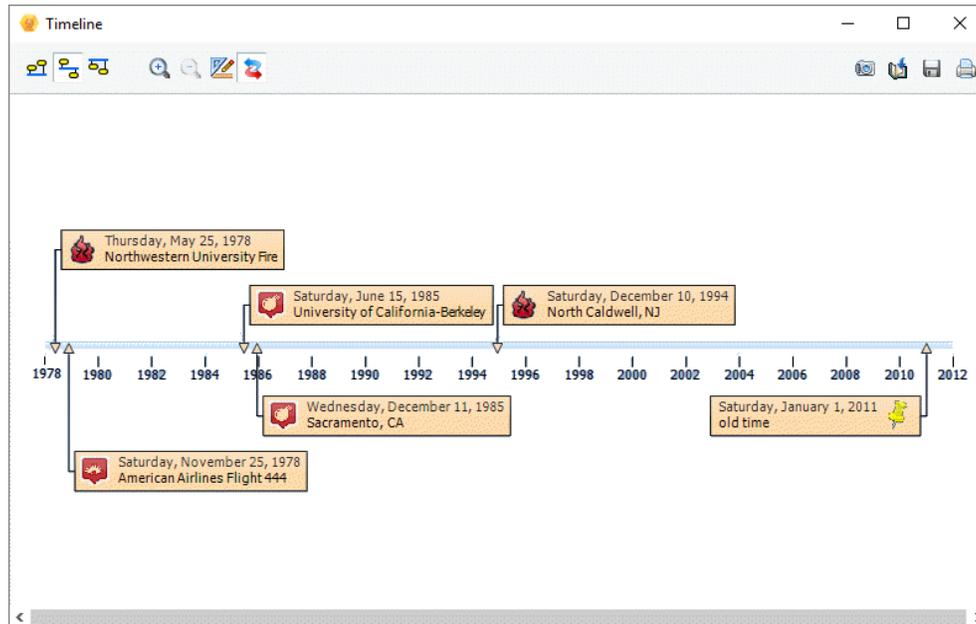
Timeline Annotations are small text boxes displayed above and below the timeline. They contain basic information about the event being plotted. By default, this box contains the label used to identify this time-tag or geo-tag. Selecting the **Include Date** option will add the stored date to this label. The **Format** for this date may be adjusted to include the weekday and to use either the short-date or long-date format settings of your Windows system. You may also append to this annotation the associated icon by selecting the **Show Icon** check box. By default, all icons will be shown, but one may instruct QDA Miner to display only icons that have been changed. The icon **Size** may also be adjusted by choosing a value between 8 and 64 pixels.

Each timeline annotation is also associated with a comment box containing more detailed information such as the link description, the associated code and category names, and the underlying text. This comment is displayed when the mouse cursor is moved over the timeline annotation.

The **Annotation Comment** section allows one to choose what information should be displayed in this comment box, such as the **Hyperlink Description**, the **Time Information**, the **Case Descriptor** or the **Name of the Variable** from which this time tag comes.

If the time tag has been attached to a code mark, one may also include the **Code Name**, its **Category** as well as any **Comment** attached to the code mark. If the time tag has been attached to a text segment, either directly or through a code mark, selecting **Coded Segment** will append this coded text segment to the annotation comment. Finally, if variables have been added to the link retrieval table, then selecting **Additional Variables** will retrieve the values of those variables for the containing case and append them to the comment.

- Once the options have been set, clicking the **OK** button creates a timeline dialog box similar to this one:



The first three buttons on the top-left of the dialog box allow one to choose the location of the scale line and timeline annotations. Three options are available:

-  Click this button to display the scale line at the bottom of the screen. All timeline annotations will be displayed above this scale line.
-  Click this button to vertically center the scale line and positions the timeline annotations above and below this scale line. The vertical position of those annotations is set automatically. One may, however, override such values by setting the vertical position of specific annotations manually (See below).
-  Click this button to display the scale line at the top of the screen and positions all timeline annotations below it.

By default, the time range of the timeline is spread so that all events can be displayed on the one screen. Click the  button to focus on a shorter time period. When zooming in a timeline, only a portion of the entire time period is displayed on-screen. One can adjust the time period displayed by moving the scroll bar located at the bottom of the dialog box. Clicking the  button increases the time range, allowing one to obtain a broader view of the sequence of events.

Clicking down the  button forces QDA Miner to synchronize the graphic with the main window so that selecting one timeline annotation will cause the main window to display the corresponding case and document from which the selected time tag comes. The corresponding text or image in the original document will also be highlighted allowing one to easily view the full context of the selected event.

Clicking the  button brings a dialog box that allows one to customize the physical appearance

of various elements of the time line such as the color of the background, the vertical line and the annotation, as well as the font size and style of the date labels and timeline annotation. One may also customize the display of any annotation, by selecting it, right clicking to display a popup menu and selecting the appropriate command. The available commands allow one to either **Remove** this even, change its background **Color** or force its **Position** relative to the timeline so that it will appear above or below it. Please note that this last option is available only when the scale line vertical position is set to be displayed in the middle of the dialog box.

The following table provides a short description of additional buttons:

| Control | Description |
|---------|-------------|
|---------|-------------|



Click this button to create a copy of the timeline to the clipboard. When this button is clicked, a pop-up menu appears, allowing one to select whether the timeline should be copied as a bitmap or as a metafile.



Click this button to append a copy of the timeline in the Report Manager. A descriptive title will be provided automatically. To edit this title or to enter a new one, hold down the Shift key while clicking this button.



Click this button to save an image of the timeline on disk. Timelines may be saved in BMP, JPG or PNG graphic file formats.

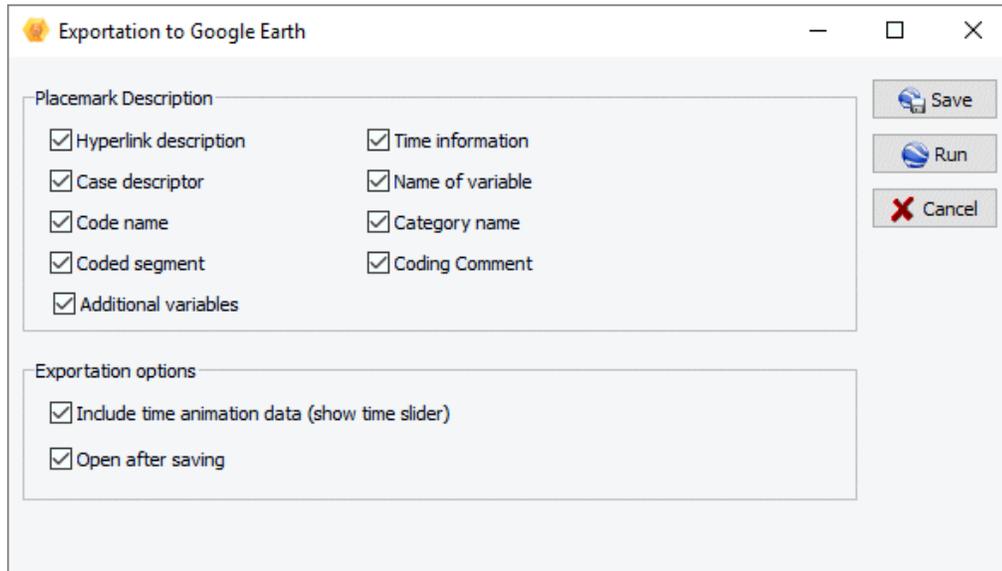


Click this button to print a copy of the displayed timeline.

Exporting and Viewing Geo-Tags in Google Earth

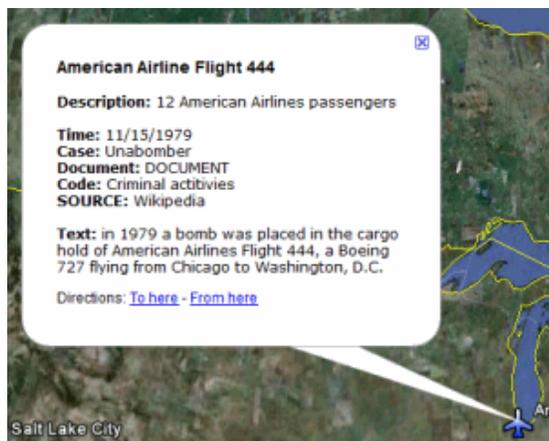
QDA Miner allows one to associate geographic coordinates with specific text segments or coded image areas. To display a specific coordinate, one simply needs to click the code mark or anywhere in the text segments while holding down the Control key. One may, however, retrieve several geographic coordinates and export those into a single KMZ or KML file and display those coordinates in Google Earth or in any other software supporting those file formats, such as ArcGIS Explorer. To create such a list of geographic locations in QDA Miner, you first need to retrieve links containing geographic coordinates by running the **LINK RETRIEVAL** command from the **RETRIEVE** menu. Those coordinates may be filtered based on several criteria, such as their distance from a specific geographic location or their associated date in keywords stored in the label or description (for further information on how to retrieve those links and on how to apply various filtering conditions, see [Link Retrieval](#)).

- Once links have been retrieved, click the  button located in the upper-right corner of the Search Hits pages. A dialog box similar to this one will appear:

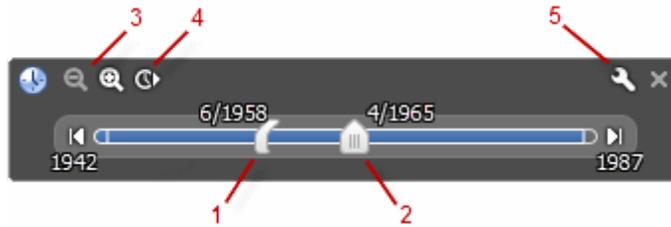


Each placemark is associated with a description that is displayed when clicked. The **Placemark Description** section allows one to choose what information should be displayed in this comment box, such as **Hyperlink Description**, **Time Information**, **Case Descriptor** or **Name of the Variable** from which this time tag comes. If the geographic tag has been attached to a code mark, one may also include the **Code Name**, its containing **Category** and any **Comment** attached to the code mark. If the time tag has been attached to a text segment, either directly or through a code mark, or to a coded area of an image, selecting **Coded Segment** will append this coded text segment or image area to the placemark description window. Finally, if variables have been added to the link-retrieval table, then selecting **Additional Variables** will retrieve the values of those variables for the containing case and append those to the description.

The image below gives an examples of a placemark description containing not only the tag label and its description but also the associated time, the case and the variable from which this information comes, as well as the code name and the coded text segment to which this geo-tag has been attached.



The **Exportation Options** section offers two additional options. The **Include Time Animation Data** option inserts in the exported geographic placemarks their associated time stamp or time range (if any), causing Google Earth to display a time slide control like the one shown below. This slide control may be used to restrict the display of placemarks to those appearing within a specified time period or to create animations showing the change in the spatial distribution of events over time.



This slide control may be used to restrict the display of placemarks to those appearing within a specified time period or to create animations showing the change in the spatial distribution of events over time. Features of the Google Earth time slider include:

1. Drag this range marker to the right or left to re-define the time range of data displayed.
2. Drag this to move the time range earlier or later.
3. Zoom in or out to shorten or lengthen the date range covered by your timeline.
4. Click this to play an animation of a sequence
5. Click this to set options for the time slider, such as the time range, the animation speed or the time format.

Selecting the **Open After Saving** option instructs QDA Miner to run Google Earth and to display the exported data.

- Once the option has been set, one can either run Google Earth by clicking  or save all placemarks to a specific file by clicking the  button.

Quotation matrix

For Miles & Huberman (1994) matrix displays of qualitative information are very useful to identify patterns that may be otherwise difficult to detect. One may create cross-case matrix to easily identify individual patterns or commonalities among individuals, or order such information using relevant variables. For example, creating a time-ordered matrix may allow one to easily identify when specific events occur, while ordering the same information on other variables (gender, age, etc.) may help one compare and contrast groups of individuals and detect subtle patterns. A matrix may also help one identify areas where some additional information needs to be collected.

The Quotation Matrix allows you to create a large grid containing all coded text segments and/or comments. Each cell represents the intersection of a specific code with either a specific case or a value of a categorical or numerical variable (age group, gender, source, etc.). Such a joint display provides a compact view of coded material -- ideal for reviewing work done by coders, easily identifying patterns, creating dense summaries of results, etc. This matrix may be created from the new QUOTATION MATRIX command of the RETRIEVAL menu to obtain a codes-by-cases quotation matrix or from the CODING BY VARIABLES command of the ANALYSIS menu for displaying coded materials by all values of a variable.

To display the Quotation Matrix:

- ? Select QUOTATION MATRIX from the RETRIEVE menu. A dialog box with following options will appear:

Quotation Matrix Settings

Case information:

Document: [SPEECH]

Codes: All Selected: []

Add variables: [CANDIDATE;TOPIC]

Cells Content:

Cell content: Coded text & comments Comment Type: Any

Text segments within quotes Include comment labels

Color highlight

Default font: Tahoma Size: 8

Separator: Empty line Coder's name & date String: [...]

Remove empty rows and columns

Maximum number of excerpts per cell: 20

Run

- ? The **Case Information** section at the top of the dialog box allows you to specify what to extract from which document and what additional information to include in the matrix.

Document: This option allows you to specify on which document variables the extraction of information should be performed. If the current project contains more than one document variable, you will have a choice of selecting either one or a combination of them. By default, the currently selected document variable is selected. To change the variable or add additional ones, click the down arrow key at the right of the list box. You will be presented with a list of all available document variables. Select the document variables from which to extract information.

Codes: This option allows you to select which codes will be extracted. By default, the extraction is performed on all codes in the codebook. You can select specific codes either from a drop-down checklist by clicking the arrow button or from a tree representation of the codebook by clicking the  button.

Add variables: This drop-down checklist box may be optionally used to add the values stored in one or more variables to the quotation matrix for the specific case from which an extracted information originates.

? The **Cells Content** section allows you to specify what will be displayed in each cell and how.

Cell Content: This option allows you to select what should be extracted and displayed in each cell. Choosing **Coded Text** will limit the extraction of coded text segments, while choosing **Coded Text and Comments** will append to those text segments associated comments. The **Coded text if Comments** is useful to create a matrix containing only coded segments containing a specific type of comments in order to review those. This option will ignore all coded segments not containing any comments or a specific type of comments set by the **Comment Type** option (see below). Finally, one may also create a quotation matrix consisting solely of comments by selecting **Comments only**. For example, by systematically paraphrasing or creating summaries of important text segments and storing those into a specific comment type, one can easily create a matrix of all those summaries.

Text segments within quotes: Use this option to add quotation marks to each segment extracted from the documents.

Comment Type: When the Cell content option specifies the display of comments or is made conditional to those, this drop-down list offers the possibility to specify which type of comments should be included. You can choose to display only comments of a particular type or all comment types by setting it to **Any**. Checking **Include Comment Labels** option will display the comments preceded by their label, while checking **Color highlight** will use the corresponding comment color as the font background, allowing you to easily identify comments of specific types.

Default font: Use this option to choose which font to use by default for displaying text information. One can also set the default font **Size** by setting a value between 6 and 30. Please note that once a quotation matrix has been created, one can always change the font type, size, style and color of any portion of text in the matrix.

Separator: To differentiate each displayed segment of a cell, you can choose among three types of separators: Segments can be separated by an **Empty Line** only, by a note indicating the **Coder's Name & Date** or by a custom **String**, which by default is [...].

Remove empty rows and columns: If for any given case a code was not applied, the quotation matrix will display an empty cell at the corresponding case column and code row. A quotation matrix may end up with rows (codes) or columns (cases) consisting entirely of empty cells. Selecting this option will reduce the sparsity of the quotation matrix by removing those empty rows or columns.

Maximum number of excerpts per cell: This option allows you to set a maximum number of text segments to extract and store in a single cell.

- ? After you set all the needed specifications, click the **Run** button to create the quotation matrix.

Working with the Quotation Matrix

Quotation matrix are highly customizable, Rows and columns may be moved or deleted and the full matrix may be transposed, exported to another format, or printed. Also, each cell is a rich text document allowing you to edit and format any one of those cells using font and paragraph formatting tools.

To transpose columns and rows of the matrix:

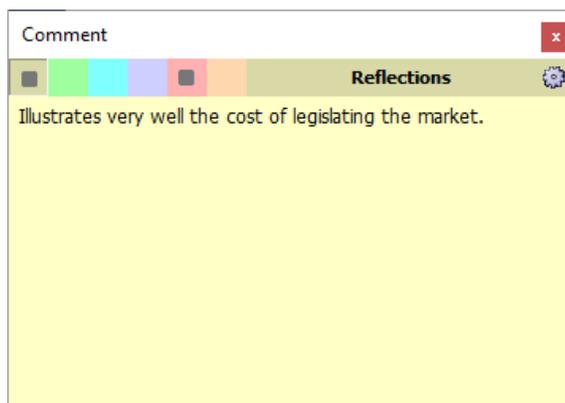
- ? Click the  button. The quotation matrix will display the same content, but code rows will become columns, and case columns will become rows.

To edit the text content of a cell:

- ? Double-click a cell, or select the cell and click the  button to edit its content. You can also right-click a cell and select **Edit** from the contextual menu. This will open the cell content in a text editing window, allowing you to change the font type, size, color, or style of selected segments of text, and apply various formatting to some paragraphs, such as indentation, alignments, spacing, and insertion of bullets.
- ? Once finished editing, click the **OK** button to save the modification and close the editor. Clicking the **Cancel** button will also close the editor but will ignore all modifications made. If the text has been modified and you attempt to close the editor using another method, a dialog box will ask you whether you want to save changes made. Click **Yes** to save the modification.

To add comments to a cell:

- ? To add a comment to a cell or edit an existing one, click the  button or right-click a cell and select **Comment**. A dialog box similar to the ones used to attach comments to coded segments will appear.



- Select the comment type you want to add by clicking its corresponding color.
- Enter the text that you want to associate with the selected cell. You may attach more than one comment type to a single cell.
- Click the **X** button (in the upper-right corner) to save the comment and to close the window.

Quotation matrix cells with added comments will be tagged with a red triangle in the upper-right corner of the cell. Selecting or hovering over this cell will display the comments.

IMPORTANT: Please note that comments attached to cells in quotation matrices may not be retrieved using the comment retrieval tool of QDA Miner which is currently restricted to searching and retrieving comments attached to text segments. The ability to attach comments to those cells remain, however, a convenient feature for the researcher to reflect upon the content of this matrix or to communicate with other people involved in the project.

To automatically adjust the row heights:

- ? Clicking down the  button will automatically adjust all rows to a height sufficient to display the content of each cell in the row. Once depressed any cell editing or column resizing operations will result in an adjustments of rows. Click this button again to disable this automatic adjustment.

To increase or decrease the text size:

- ? Click the  or  buttons to increase or decrease the font size of the cell text as well as the matrix header text.

To adjust the width of the matrix columns:

- ? Right-click any cell and select **Column Widths**. A dialog box will appear. Enter any number between 50 and 1000 and click OK. All columns of the matrix will be set to this width.

To remove rows or columns:

- ? Select a cell in the row or column you would like to remove. Right-click the cell, and under the **Remove** submenu, you can choose between Selected row(s) and Selected column(s).
- ? The selected row(s) or column(s) will be removed from the quotation matrix.

To append a copy of the quotation matrix to the Report Manager:

- ? Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- ? Click the  button. A Save File dialog box will appear.
- ? In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV),

MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV), or Stata data file (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.

- ? Type a valid file name with the proper file extension.
- ? Click the **Save** button.
- ? Saving the table as a *.pmtx file allows you to open the file with the Provalis Matrix Editor which shares the same quotation matrix functionalities described above, including row, column, and cell editing, as well as the capability to add or edit comments to individual cells.

To print the table:

- Click the  button.

Coding Analysis Features

QDA Miner provides several tools to assist in the coding task and to perform descriptive, comparative and exploratory analysis of codings. These tools may be used to identify regularities and patterns in coding, uncover hidden relationships between codes and other properties of the cases, etc.

The [Coding Frequencies](#) tool allows one to obtain a list of all codes in the current codebook along with their description and various statistics such as their frequency, the number of cases in which they are found, and the total number of words in the associated text segments. This dialog box also allows one to produce bar charts and pie charts from those statistics.

The [Codes Co-occurrences](#) tool uses information about the proximity or the co-occurrence of codes within documents to explore potential relationships among them as well as similarities among cases. This dialog box gives access to various statistical and graphic tools, such as cluster analysis, multidimensional scaling, and proximity plots.

The [Coding Sequences](#) tool can be used to identify recurring sequences of codes. This feature can produce frequency lists of all sequences involving two selected sets of codes as well as the percentage of time one code follows or is followed by another one.

The [Coding by Variable](#) tool is useful for identifying or testing potential code similarities or differences between subgroups of cases (categorical variable) or to assess the relationship between these codes and other numerical variables. Various statistical and graphical tools are used for this purpose such as contingency tables, association statistics, bar charts and line charts, heatmaps, correspondence plot, etc.

The [Inter-Coders Agreement](#) tool is used to compare the consistency of coding between several coders. This tool can be useful to uncover differences in interpretation, clarify equivocal rules, identify ambiguity in the text, and ultimately quantify the final level of agreement obtained by those raters.

QDA Miner may also be used in conjunction with the following two quantitative analysis software tools:

[WordStat](#) is a powerful quantitative content analysis and text-mining software. When used as an add-on to QDA Miner, it analyzes words and phrases found in specific documents or in selected code segments. WordStat can perform simple descriptive analysis or explore in greater details the relationship between words or categories of words and other numeric or categorical variables.

[Simstat](#) is a comprehensive statistical analysis application. Since it uses the same file format as QDA Miner, Simstat can be used to perform statistical analysis on any numerical data stored in a QDA Miner project file. It can perform numeric and alphanumeric computation, transformation and recoding of variables, as well as advanced file management procedures, such as data file merging, file aggregation, etc.

Coding Frequency

You can use the **CODING FREQUENCY** command to obtain a list of all codes in the current codebook along with their description and the category to which they belong. This dialog box may also be used to obtain various statistics for each code such as their frequency, the number of cases in which they are found, and the total number of words in the associated text segments.

To perform a coding frequency analysis:

- Select **CODING FREQUENCY** from the **ANALYZE** menu. this command displays a dialog box similar to the one below:

| | Count | % Codes | Cases | % Cases | Nb Words | % Words |
|----------------------------|-------|---------|-------|---------|----------|---------|
| Economic | | | | | | |
| Globalisation | | | | | | |
| Local Economy | 50 | 27.5% | 7 | 77.8% | 2867 | 13.5% |
| Social | | | | | | |
| Race/Ethnic relation | 12 | 6.6% | 4 | 44.4% | 1302 | 6.1% |
| Ethic | 29 | 15.9% | 9 | 100.0% | 2746 | 12.9% |
| Values | | | | | | |
| Liberal | | | | | | |
| Environment | 1 | 0.5% | 1 | 11.1% | 26 | 0.1% |
| Novelty | 5 | 2.7% | 3 | 33.3% | 257 | 1.2% |
| Representativeness | 13 | 7.1% | 6 | 66.7% | 1392 | 6.5% |
| Justice | | | | | | |
| Welfare state (more state) | | | | | | |
| Conservative | | | | | | |
| Freedom | 27 | 14.8% | 6 | 66.7% | 2924 | 13.7% |

Search in: This option allows you to specify which document variables to search. If the current project contains more than one document variable, you will have a choice of selecting either one or a combination of them. By default, all document variables are selected. To restrict the analysis to only a few of them, click the down arrow key at the right of the list box. You will be presented with a list of all available document variables. Select the variables on which you want the search to be performed.

Codes: This option allows you to select which codes will be analyzed. By default, the analysis is performed on all codes in the codebook. You can select specific codes either from a drop-down checklist by clicking the arrow button or from a tree representation of the codebook by clicking the button. You may also select codes based on a minimum frequency criteria by clicking the button.

Clicking the button displays results in two different formats, a tree grid format replicating the structure of the codebook and a table format. By default, it will add four columns to the right side of the tree grid or table containing summary statistics on code usage.

| | |
|----------------|---|
| Count | Number of times this code has been used. |
| Cases | Number of cases in which this code appears. |
| % Codes | Percentage of coding associated with this code. |

% Cases Percentage of cases containing this code.

Selecting the **Coverage** checkbox displays two additional columns:

Nb Words Total number of words in all text segments associated with this code.

% Words Percentage of documents tagged with this code. The percentage is based on the total number of words.

If graphics are also included in the search, the following columns will also become visible:

Nb Pixels Total number of pixels (in K) in all graphic areas associated with this code.

% Image Percentage of image areas tagged with this code.

Working with the tree grid:

The  button allows you to produce bar charts or pie charts to visually display the distribution of specific codes. To select codes to chart, click the  button to display checkboxes, and then check all codes you want to plot.

Click the  button to copy an image of the tree grid to the clipboard. The image may be stored either in bitmap or in Windows Metafile format.

Click the  button to access the mapping function, which allows you to analyze the spatial distribution of various codes.

The  button can be used to export coding statistics for the displayed results along with other variables to Tableau data visualization tool. For further information see [Exporting to Tableau](#).

Click the  button to append an image copy of the tree grid in the Report Manager. A descriptive title will be provided automatically for the image. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.

An image of the tree grid may be saved to disk in BMP, WMF, JPEG or PNG format by clicking the  button.

You may also print this tree grid by clicking the  button.

Working with the table:

To sort the table in ascending order on any column value, simply click the column header. Clicking a second time on the same column header sorts the rows again in descending order.

Click the  to perform a text search on the table.

To spread long descriptions over more than one line, click down the  button.

When statistics are shown in the table, the  button allows one to produce bar charts or pie charts to visually display the distribution of specific codes. To produce charts:

- Sort the columns in the order you want the values to be shown graphically.
- Select the rows you would like to plot (multiple but separate rows can be selected by clicking the desired rows while holding down the **Ctrl** key)
- Click the  button.

For further information see [Bar Chart and Pie Chart](#)

Click the  button to access the mapping function, which allows you to analyze the spatial distribution of various codes.

The  button can be used to export coding statistics for the displayed results along with other variables to Tableau. For further information see [Exporting to Tableau](#).

Click the  button to append a copy of the table in the Report Manager. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.

The list of codes may be saved to disk in Excel, plain ASCII, text delimited, MS Word, HTML or XML format by clicking the  button.

You may also print this list by clicking the  button.

Bar Chart and Pie Chart

QDA Miner allows you to produce bar charts and pie charts to visually display the distribution of specific codes.

To produce such charts:

- Run the **CODING FREQUENCY** command from the **ANALYZE** menu.
- Click the **Search** button.
- Sort the table to the desired graphic order of the values.
- Select the rows you would like to plot (multiple but separate rows can be selected by clicking while holding down the **Ctrl** key)
- Click the  button.

Types of Charts

Five types of charts may be used to depict the distribution of keywords or content categories:



The vertical bar chart is the default chart used to display absolute or relative frequencies of keywords or content categories.



The horizontal bar chart displays the same information as the vertical one but is especially useful when the number of keywords is high and their labels cannot be displayed entirely on the bottom axis.



The pie chart is useful to display the relative frequency of each code and compare individual values to other values and to the whole. Numerical values displayed in pie charts are always expressed in percentages of either the total frequency or case occurrences.



Like the pie chart, the donut chart display the relative frequency of each codes and compare individual values to other values and to the whole. Removing the inner section of the chart facilitates the estimation of proportions and comparison of slices.



The tag cloud shows the relative frequency of each code. This graphic is useful for quickly perceiving the most prominent code.

The **Plot** option allows you to select the values that will be used as the scale for the length of bars in bar charts or as the percentage base for pie charts. For bar charts the options are:

| | |
|------------------|---|
| FREQUENCY | Number of occurrences of the code |
| NB CASES | Number of cases where this code appears |
| NB WORDS | Total number of words associated with this code |
| % CODES | Percentage of codes associated with this code |
| % CASES | Percentage of cases where this keyword appears |
| % WORDS | Percentage of words associated with this code |

If images have been coded, the following options may be available:

| | |
|------------------|--|
| NB PIXELS | Number of pixels in kilobytes associated with this code. |
| % PIXELS | Percentage of pixels associated with this code. |

For pie charts, three options are available to specify how percentages will be computed:

| | |
|------------------|---|
| FREQUENCY | Number of occurrences of the code |
| NB CASES | Number of cases where this code appears |
| NB WORDS | Total number of words associated with this code |

If images have been coded:

| | |
|------------------|---|
| NB PIXELS | Number of pixels in kilobytes associated with this code |
|------------------|---|

View Others: This option displays an additional bar or slice representing all items in the frequency table that have not been selected.

The Toolbar

The following table provides a short description of the available buttons and controls:

| Control | Description |
|---|---|
|  | Press this button to append a copy of the graphic in the Report Manager. A descriptive title will be provided automatically. To edit this title or to enter a new one, hold down the SHIFT keyboard key while clicking this button. |
|  | Press this button to save a chart on disk. Charts may be saved in BMP, JPG or PNG graphic file formats. |
|  | Pressing this button prints a copy of the displayed chart. |
|  | Click this button to turn on/off the 3D perspective for the current chart. |
|  | This button allows the editing of various features of the chart such as the left and bottom axis, the chart and axis titles, the location of the legend, etc. (see below for available options) |
|  | This button is used to create a copy of the chart to the clipboard. When this button is |

clicked, a pop-up menu appears allowing one to select whether the chart should be copied as a bitmap or as a metafile.



Press this button to vertically display the labels on the bottom axis.



This button allows you to sort the chart by frequency or labels either ascending or descending.



This control allows you to increase the font size of the word cloud.



This option allows you to choose your color palette.

Customizing Bar Charts and Pie Charts

Clicking the  bottom displays a dialog box that allows one to customize the appearance of bar charts and pie charts. The options available in this dialog box represent only a small portion of all settings available.

Left or Bottom Axis

Minimum / Maximum: QDA Miner automatically adjusts the vertical axis scale to fit the range of values plotted against it. To manually set these values, type the desired minimum and maximum.

Increment: Increasing or decreasing this value affects the distance between numbers as well as tick marks. Horizontal grid lines are also affected by modification of this value.

Grid: This option turns horizontal grid lines on and off. Grid lines extend from each tick mark on an axis to the opposite side of the graph. To increase or decrease the number of grid lines or the distance between those lines, change the Increment value of the axis. A list box also allows a choice among five different line styles to draw those grid lines.

Display values above bars: Adding labels for underlying data makes the chart values easier to read. Enabling the **Anchor Lines** checkbox also adds a line connecting each value to the top of the corresponding bar.

Titles

Proper titles and axis labels are of utmost importance when describing the information displayed in a chart. By default, QDA Miner uses variable names and labels as well as other predefined settings to provide such descriptions.

The title page allows one to modify the **top** title, as well as the labels on the **left**, **bottom** and **right** axis. To edit the title, select the proper radio button. Enter several lines of text for each title by pressing the **<Enter>** key at the end of a line before entering the next line.

The **Font** button on the right side of the edit box allows you to change the font size or style of the related title.

3D View

Orthogonal: Turning this option off disables the free elevation and rotation of the 3D chart.

Zoom: This option zooms the whole chart. Expressed as a percentage, increasing the value positively will bring the chart towards the viewer, increasing the overall chart size as the Zoom value increases.

3D Percent: The 3D Percent property indicates the size ratio between chart dimensions and chart depth by specifying a percent number from 1 to 100.

Perspective: Use this property with Orthogonal unchecked to modify the 3D perspective of the Chart. Larger values add more depth perspective.

Bar shadow: Enabling this option adds a shadow to the sides of 3D bars. Turning it off will color the sides of the bar the same as the front.

Bar width: This option determines the percent of total bar width used. Setting this value to 100 makes joined bars.

Bar depth: Use this property to limit the depth that each bar series use. By default, bars will take up the part proportional to the number of bar series in the chart so that the back of a bar will join the front of the bar immediately behind it. To insert a gap between series of bars, decrease this value.

Pie depth: Use this property to change the thickness of the pie chart.

Style

Style: This options allows you to choose the shape of the bar.

Gradient: This option allows you to choose the fading of the bar color.

Outline: Check this box if you would like an outline around your bar.

Color: This option allows you to determine the color of the outline.

To further customize the chart, modify data points or value labels, click the  button located on the right side of the dialog box.

Cluster Analysis

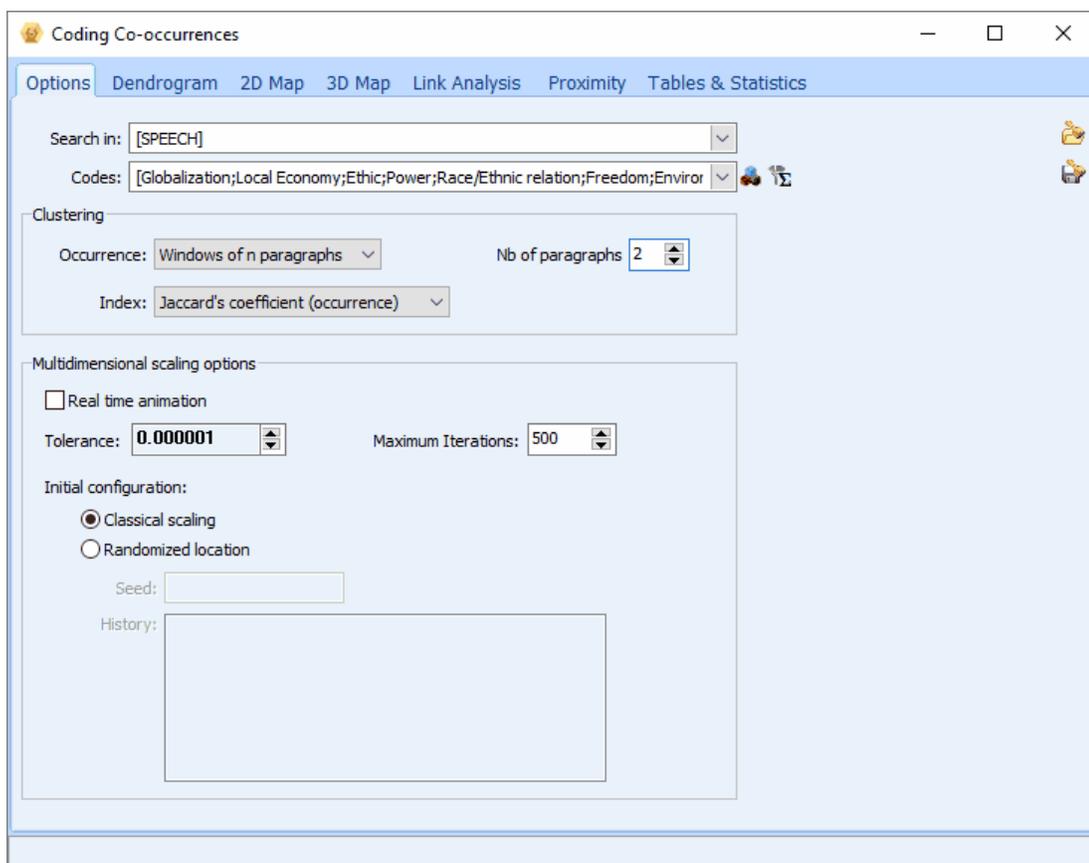
QDA Miner allows you to further explore the relationship among codes by providing various graphic tools to assist in the identification of related codes. These tools are obtained through the computation of similarity or co-occurrences index and the application of hierarchical cluster analysis and multidimensional scaling on all or selected codes. Results are displayed in the form of dendrograms, concept maps and proximity plots. Cases may also be clustered based on their content similarity using the same statistical and graphic tools.

The **coding co-occurrence** and the **case similarity** functions are similar in their set up.

To access the cluster analysis function:

- Select the **CODING CO-OCCURRENCES** or the **CASE SIMILARITY** command from the **ANALYZE** menu.

A dialog box similar to the one below will appear. Both functions have similar dialog boxes.



The **Options** tab of the dialog box is used to restrict the analysis to specific document variables or specific codes. It specifies whether clustering should be performed on codes or on cases, and can also be used to set various analyses and display options for both types of analysis.

Search in: This option allows you to specify which document variables to analyze. If the current project contains more than one document variable, you will have a choice of selecting either one of them or a combination of them. By default, all document variables are selected. To restrict the analysis to a few of them, click the down arrow key at the right of the list box. You will be presented with a list of all available document variables. Select the variables on which you want the search to be performed.

Codes: This option allows you to select which codes will be analyzed. By default, the analysis is performed on all codes in the codebook. You can select specific codes either from a drop-down checklist by clicking the arrow button or from a tree representation of the codebook by clicking the  button. You may also select codes based on a minimum frequency criteria by clicking the  button.

Clustering Cases

When clustering is set to be performed on cases, the similarity matrix used for clustering and multidimensional scaling consists of cosine coefficients computed on the relative frequency of the various codes. The more similar two cases will be in terms of the distribution of codes, the higher will be this coefficient.

Data: This option allows you to select which indicator will be used to compare the importance of codes in the various cases. Four indicators are available:

Code Occurrence: If a code appears in each case, without taking into account the number of times each code appears.

Code Frequencies: The number of times a code has been used in a case.

Number of Words: The total number of words that have been assigned to different codes.

Percentage of Words: The total number of words assigned to different codes in a case divided by the total number of words found in documents associated with each case.

Clustering Codes

When clustering codes, several options are available to define co-occurrence and to select which similarity index will be computed from the observed co-occurrences.

Occurrence: This option allows you to specify how a co-occurrence will be defined. By default, a co-occurrence is said to happen every time two codes appear in the same document (**within case** option). You may also restrict the definition of co-occurrence to codes that are separated by no more than a specified number of paragraphs (**window of n paragraphs** option), or to codes that overlap each other (**segment overlap** option). Lastly, you can also restrict the definition of co-occurrence even further by limiting it to instances where codes have been assigned to the exact **same segment**.

Index: The Index option allows the selection of the similarity measure used in clustering and in multidimensional scaling. Four measures are available. The first three measures are based on the mere occurrences of specific codes in a case and do not take into account their frequency. In all these indexes, joint absences are excluded.

Jaccard's coefficient: This coefficient is calculated from a fourfold table as $a/(a+b+c)$, where **a** represents cases where both items occur, and **b** and **c** represent cases where one item is found but not the other. In this coefficient, equal weight is given to matches and non-matches.

Sorensen's coefficient: This coefficient is similar to Jaccard's but matches are weighted double. Its calculating formula is $2a/(2a+b+c)$, where **a** represents cases where both items occur, and **b** and **c** represent cases where one item is present but the other one is absent.

Ochiai's coefficient: This index is the binary form of the cosine measure. Its calculating formula is $SQRT(a^2/((a+b)(a+c)))$, where **a** represents cases where both items occur, and **b** and **c** represent cases where one item is present but not the other one.

Cosine theta: This coefficient measures the cosine of the angle between two vectors of values. It ranges from -1 to +1. This coefficient takes into account not only the presence of a code in a case, but also how often it appears in this case.

The options below apply whether clustering cases or codes. They will affect either the calculation or the display of multidimensional scaling charts.

Real-time animation: When this option is enabled, the multidimensional plots are updated after every iteration allowing the user to monitor the progress made during the analysis at the cost of higher computing time.

Tolerance: This option specifies the tolerance factor that is used to determine when the algorithm has converged with a solution. Reducing the tolerance value may produce a slightly more accurate result, but will increase the number of iterations and the running time.

Maximum Iterations: This option allows you to specify the maximum number of iterations that are to be performed during the fitting procedure. If the solution does not converge with the limit specified by the **Tolerance** option before the maximum number of iterations is reached, the process is stopped and the results are displayed.

Initial configuration: This option allows you to specify whether multidimensional scaling will be applied on a random configuration of points or on the result of classical scaling.

Classical Scaling: By selecting this option, you can perform a classical scaling first on the similarity matrix, and then use the derived configuration as initial values for the ordinal multidimensional scaling analysis.

Randomized Location: This option instructs QDA Miner to perform the multidimensional scaling analysis on a random configuration of points. By default, QDA Miner initializes the random routine before each analysis with a new random value. The seed value used for the creation of this initial configuration is stored along with the final stress value in the **History** list box, located at the bottom of the dialog box. The **Seed** option may be used to specify a starting number that will initialize the randomization process and produce a fixed random sequence. To recall a specific seed value used previously, double-click it in the **History** list box.

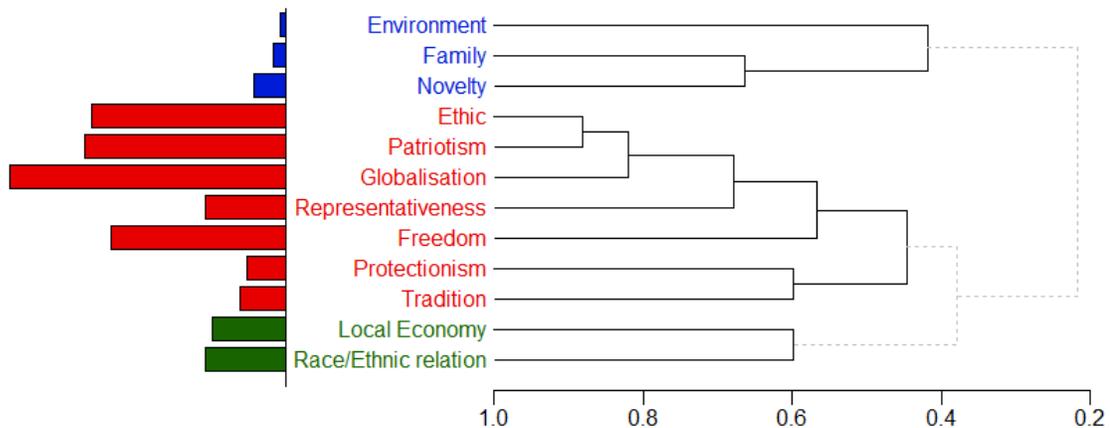
To perform a cluster analysis:

- Once the various options described above have been set, simply move to the appropriate tab to perform the requested analysis.
- To store the search expression and options, click the  button and specify the name under which the query options will be saved.
- To retrieve a previously saved query, click the  button and select from the displayed list the name of the query you would like to retrieve (for more information, see [Saving and Retrieving Queries](#)).

Dendrogram

QDA Miner uses an average-linkage hierarchical clustering method to create clusters from a similarity

matrix. The result is presented in the form of a dendrogram, also known as a tree graph. In this type of graph, the vertical axis is made up of the items, and the horizontal axis represents the clusters formed at each step of the clustering procedure. Codes that tend to appear together are combined at an early stage, while those that are independent from one another or those that do not appear together tend to be combined at the end of the agglomeration process.



It is important to remember that a dendrogram only specifies the temporal order of the branching sequence. Any cluster can be rotated around each internal branch on the tree without in any way affecting the accuracy of the dendrogram. The best analogy here is to think of a Calder mobile. Different photos for this type of mobile will yield different distances between hanging objects.

The following controls are found at the top of the dendrogram page:

No. Clusters This option sets how many clusters the clustering solution should have. Different colors are used both in the dendrogram and in the 2D and 3D maps to indicate membership of specific items to different clusters.

Display This option lets you choose whether the vertical lines of the dendrogram represent the agglomeration schedule or the similarity indices.



When clustering codes co-occurrences, pressing this button displays bars beside each dendrogram item to represent their relative frequencies.



Use this button to increase the dendrogram font size and focus on a smaller portion of the tree



Use this button to reduce the dendrogram font size and view a larger portion of the tree.



To retrieve text segments associated with a specific cluster, click anywhere on a cluster to select it (the selected cluster is displayed with thicker black lines), and then click on this button to retrieve the associated documents. This operation retrieves all pairs of coded segments associated with the selected cluster.



This button allows you to perform a silhouette analysis to assess the quality of the clustering solution. For more information on this feature see [Silhouette Analysis](#).



Press this button to append a copy of the graphic in the Report Manager. A descriptive title will be provided automatically. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.



This button allows storing the displayed dendrogram into a graphic file. QDA Miner supports three different file formats: .BMP (Windows bitmap files), .bmp (Portable Network Graphic compress files) and .jpg (Jpeg compressed files).



This button is used to create a copy of the chart to the clipboard. When this button is clicked, a pop-up menu appears allowing one to select whether the chart should be copied as a bitmap or as a metafile.



Pressing this button prints a copy of the displayed chart.

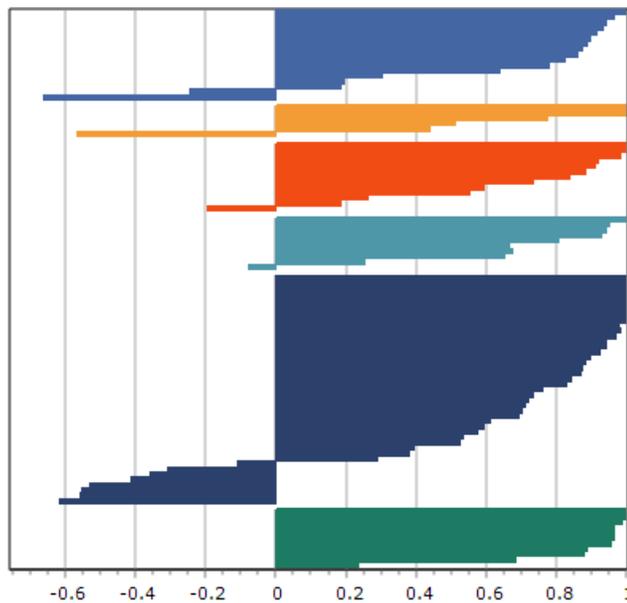
Note: Clustering using other similarity or distance measures or agglomeration methods may be achieved using Simstat and the MVSP multivariate analysis add-on module.

Silhouette Analysis

The silhouette method proposed by [Rousseeuw \(1987\)](#) is useful to assess the quality of clustering. It consists of a graphical tool to easily identify relationships of all items to other items in the same clusters and a global statistical coefficient to assess the overall quality of a cluster solution. The silhouette plot of a cluster solution is constructed by computing for each element i a coefficient S_i using the following formula:

$$S_i = (b_i - a_i) / \max(a_i, b_i)$$

Where a_i corresponds to the average distance between an element i and all other elements in its cluster, and b_i is the average distance between this element and the next closest cluster (on average). This closest cluster corresponds to the second-best choice, or the cluster to which this element would have been part of if the other elements in the cluster in which it currently belongs did not exist. The difference in distance is then computed and divided by the largest of those two distances. Please note that if the index is a similarity score, the a_i and b_i in the numerator should be inverted. By computing this ratio, we obtain a value between -1 and +1. Positive values indicate that the item has been assigned to the proper cluster, the higher the value, the more likely this item is properly located. On the other hand, a negative value indicates that this element is likely "misclassified", being, on average, closer to items in another cluster. Values close to zero occur for items that could very well belong to either cluster. A graphic representation of the relationship between every item and their respective cluster may then be plotted by sorting items in each cluster in descending order of this ratio and by plotting different clusters below each other.

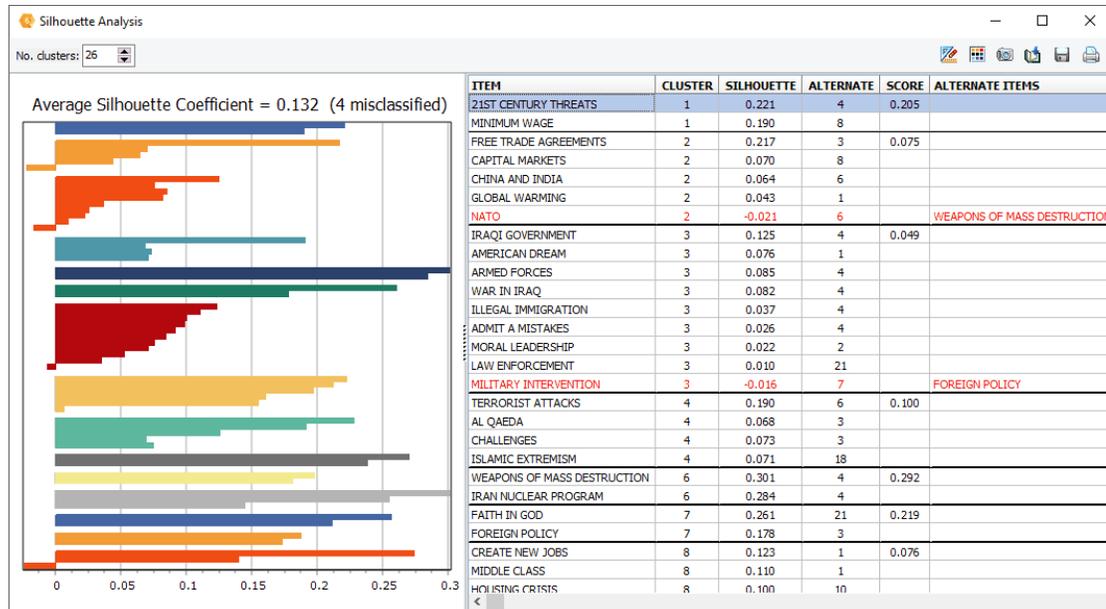


The silhouette coefficient for a cluster can be obtained by computing the average of all silhouette coefficients for every element in the cluster, allowing one to assess the quality of each cluster. Finally,

by computing the average of silhouette coefficients of all clustered elements we obtain a measure of the quality of the clustering solution which may then be used to select the optimal number of clusters.

To create a silhouette profile:

- After performing a cluster analysis, click the  button on the tool bar of the Dendrogram page. A dialog box similar to this one will appear:



The following table provides a short description of the available buttons and controls:

Control Description

No. Clusters This option sets how many clusters the clustering solution should have. Changing the number of clusters updates the silhouette plot and associated table as well as the global silhouette coefficient.

 This button allows the editing of various features of the chart such as the left and bottom axis, the chart and axis titles, etc.

 This option allows you to choose the color palette used to differentiate clusters. Choosing a new color palette affects both the silhouette plot and the dendrogram.

 This button is used to create a copy of the chart to the clipboard. When this button is clicked, a pop-up menu appears allowing one to select whether to copy the chart or the table, both options being copied as a bitmap image.

 Press this button to append a copy of the chart or the table in the Report Manager. When clicked, a pop-up menu appears allowing you to choose whether to copy the chart or the table. A descriptive title will be provided automatically. To edit this title or to enter a new one, hold down the SHIFT keyboard key while clicking this button.

 Clicking this button allows you to save the chart or the table on disk. Charts may be saved in BMP, JPG or PNG graphic file format. Tables can be saved in the following formats: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV) and Stata data files (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner

using the Provalis Matrix editor.



Pressing this button prints a copy of the displayed chart or table. When this button is clicked, a pop-up menu appears allowing one to select whether to print the chart or the table.

2D and 3D Concept Maps

Concept maps are graphic representations of the proximity values calculated on all included items (codes or cases) using multidimensional scaling (MDS). When clustering codes, each point represents a code and the distances between pairs of points indicates how likely these codes tend to appear together. In other words, codes that appear close together on the plot usually tend to occur together, while codes that are independent from one other or that do not appear together are located on the chart far from each other. The interpretation of multidimensional scaling plot is somewhat different when analyzing cases. In this case, each point represents a case and the distance between pairs of points indicate how similar the two cases are. Cases with similar patterns of codes will tend to appear close each other, while dissimilar cases will be plotted far from each other. Colors are used to represent membership of specific items to different partitions created using hierarchical clustering. The resulting maps are useful to detect meaningful underlying dimensions that may explain observed similarities between items.

Please note that since multidimensional scaling attempts to represent the various points into a two- or three-dimensional space, some distortion may result, especially when this analysis is performed on a large number of items. As a consequence, some items that tend to appear together or that are parts of the same cluster may still be plotted far from each other. As well, performing a multidimensional scaling on a large number of items usually produces a cluttered map that is hard to interpret. For these reasons, interpretation of concept maps may be feasible only when applied to a relatively limited number of items.

2D and 3D Map Controls

No. Clusters This option is used to set how many clusters the clustering solution should have. Different colors are used both in the dendrogram and in the 2D and 3D maps to indicate membership of specific items to different clusters.



The actual orientation of axes in the final solution is arbitrary. The map may be rotated in any way desired; the distances between items remain the same. The rotating knob can be used to adjust the final orientation of axes in the plane or space in order to obtain an orientation that can be most easily interpreted.



Clicking this button enables you to zoom in on a plot. To zoom in on an area of the plot, hold the left mouse button down and drag the mouse down and to the right. A rectangle indicates the selected area. Release the left mouse button to zoom.



Clicking this button restores the original viewing area of the plot.



Clicking this button performs another multidimensional scaling on a new random configuration of points. This button is visible only when the initial configuration is set to **Random Location**.



Pressing down this button creates a constrained multidimensional scaling. This mapping algorithm allows one to preserve the clustering structure in multidimensional scaling plots, making the interpretation of 2D and 3D MDS maps a lot easier and more consistent with the clustering solutions. Enabling this

option allows one to use the MDS module to create maps of concepts similar to those suggested by Trochim, in its Concept Mapping procedure.



Pressing down this button displays lines to represent relationships between data points of the multidimensional scaling plot. When the button is down, a cursor will appear in a tool panel below the plot, allowing you to select the minimum association strengths to be displayed.



Pressing down this button creates a bubble plot where the areas of data points are proportional to the relative frequency of those items. This type of display is especially useful when you need to take into account a third variable, in this specific case the frequency of items, when interpreting the distance between data points.



This button is used to create a copy of the chart to the clipboard. When this button is clicked, a shortcut menu appears in which you can select whether the chart should be copied as a bitmap or as a metafile.



Press this button to append a copy of the graphic in the Report Manager. A descriptive title will be provided automatically. To edit this title or to enter a new one, hold down the SHIFT keyboard key while clicking this button.



This button allows editing of various features of multidimensional scaling plots, such as the appearance of value labels and data points, chart and axes titles, the location of the legend, etc. (see [Multidimensional Scaling Plot Options](#))



This button allows storing the displayed multidimensional scaling plot in a graphic file. QDA Miner supports three different file formats: .BMP (Windows bitmap files), .bmp (Portable Network Graphic compress files) and .JPG (jpeg compressed files).



Clicking this button prints a copy of the displayed chart.

More 3D Map Controls



This button shows or hides left, bottom and back walls.



Clicking this button draws anchor lines from the floor to the data point to better locate data points in all 3 dimensions.



Clicking this button allows changing the viewing angle of the chart. To rotate the chart, make sure this button is selected, click any area of the chart, hold the mouse button down and drag the mouse to apply the desired rotation.



Locating a data point on the depth dimension of a 3D plot can be very difficult, especially when the plot remains static. One often has to rotate this plot constantly on the various axes to obtain an accurate idea of where the data point is located on this third axis. Clicking this button forces QDA Miner to rotate the plot automatically. To disable automatic rotation, click a second time.



This button is used to create an AVI movie file of the rotating chart. It behaves as both a record and a stop button. To start recording, simply click this button. Click again to stop the recording and to save the AVI movie file to disk. The  button must be activated for this function to function.

Please see the [Chart Animation](#) section for more information on recording a 3D animation and saving it in AVI, PowerPoint or GIF file formats.

Multidimensional Scaling Plot Options Dialog

The various options in this dialog box are used to customize the appearance of multidimensional scaling plots. These options represent only a small portion of all settings available.

Data Points

View data points: By default, multidimensional scaling plots display both the data points and their associated labels. This option toggles on and off the display of the data points.

Style: This option defines the shape used to display the data points. Nine different pointer shapes may be used to represent data points (e.g. square, triangles, dots, cross, etc.).

Shadow: This option toggles on and off the shade on the sides of data points. This option only affects square, triangle and down triangle data points when viewed in three-dimension.

Size: The option specifies the width and height of data points in pixels.

Data Labels

Transparent labels: This option allows you to specify whether data labels are to be displayed on an opaque background or whether the background should be invisible.

Background: This option allows you to select the background color of data labels when not transparent

Border: This option enables or disables the rectangle surrounding the label background.

Vertical gap: The vertical gap property determines the vertical distance in pixels between the top of the data point and the bottom of its label.

Font: Click this button to adjust the font properties used to display data labels (i.e., style, size, and color).

Walls and Page Frame

Wall visible: Use this option to toggle the display of left, back and bottom walls to simulate a 3D effect.

Transparent: The Transparent property controls whether the wall background will be opaque or transparent.

Dark 3D: This option shades the sides of the walls.

Title

Show Title: By default, multidimensional scaling plots have no title. To display a title, enable the Show Title option and enter the desired title in the edit box to the right of this check box. Enter several lines of text by pressing the **<Enter>** key at the end of a line before entering the next line.

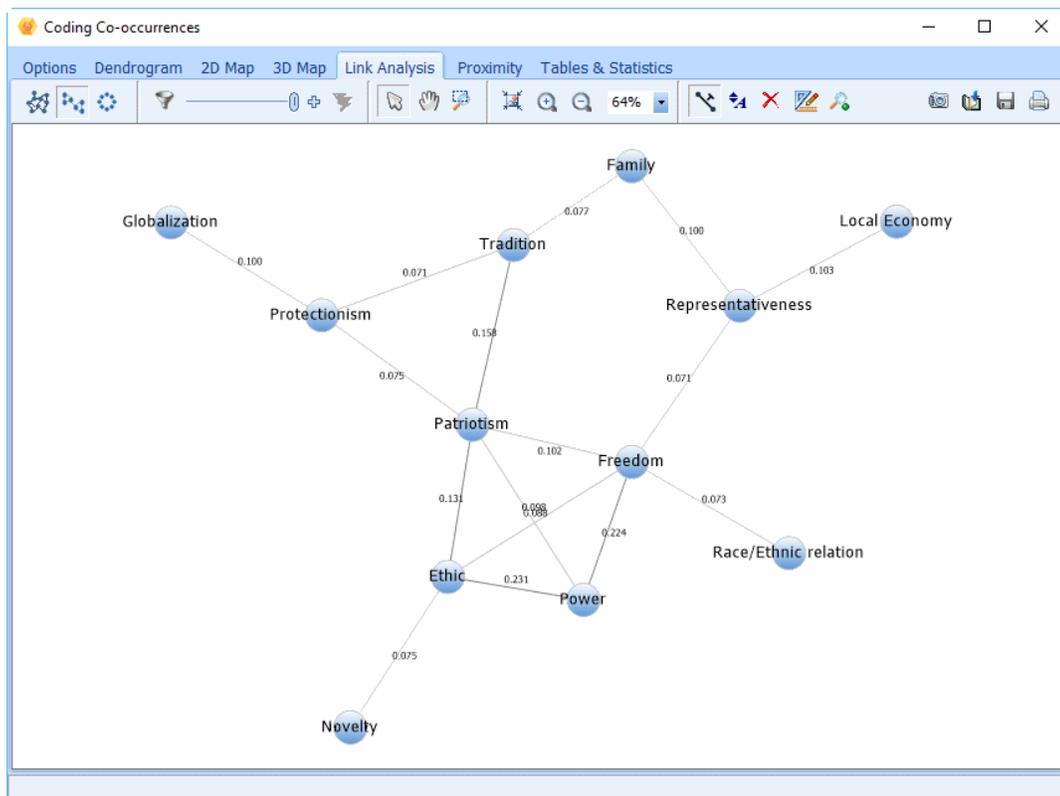
The **Font** button at the bottom of this page is used to change the font size or style of this title.

To further customize the chart, edit data points, value labels, etc., click the  button located on the right side of the dialog box.

Link Analysis

The Link Analysis feature allows you to visualize the connections between codes or cases using a network graph. It offers a high level of interactivity, allowing you to explore relationships as well as detect underlying patterns and structures of co-occurrences using three layout types: a multidimensional scaling, a force-based graph, and a circular layout.

This tab is initially associated with the clustering features of the **Dendrogram** tab such that selecting a specific cluster in the dendrogram will result in a network view of its elements - where each element is represented as a node, while their relationship will be represented as a line connecting those nodes (also called an "edge"), the thickness of this line representing the strength of this relationship. Nodes and edges can be edited, deleted or moved, and new nodes and edges may also be added, either manually or using statistical criteria.



Layout Selection

The following three buttons allow you to select one of three layout types.

-  Clicking this button assigns the location of nodes in a multidimensional space such that nodes that co-occur more often are plotted close together, while those co-occurring less often are plotted far from each other.
-  Clicking this button draws a force-directed graph in which links are more or less of equal length and there are as few crossed links as possible.
-  Clicking this button draws nodes in a circle. Nodes that co-occur often are plotted close together.

Nodes and Links Selection

-  Clicking this button allows one to select nodes and links, either manually or based on statistical criteria. See the **Selecting Nodes and Links** section below for more information

on this feature.

-  This track bar can be used to hide links. By default, the cursor is positioned to the right. Moving it to the left gradually remove the weakest links, allowing one to more clearly identify the strongest ones.
-  By default, a graph includes links reaching a specific statistical threshold. Clicking this button adds additional links by gradually reducing this statistical threshold.
-  Clicking this button removes all links that have been hidden using the track bar control (see above), deletes all nodes that are no longer connected, and refreshes the display to take into account the lower number of elements in the graph.

Navigation Mode

The following three buttons allow you to select the default mouse behavior.

-  Click this button to select specific nodes and links. To select multiple items, hold the Ctrl key while clicking additional items or select the rectangular region of the graph containing the items to select.

To select a node along with all nodes connected to it (neighbors), hold the **Alt** key while clicking the node. One may also select a node, right-click and choose GET NEIGHBORS.

Once items are selected, they can then be moved, deleted or edited. One may also search for associated text segments either by right-clicking to call up a contextual menu or by clicking the  button on the toolbar.

-  Clicking this button lets one control which part of the image is visible in the image window.

-  Clicking this button allows one to zoom into a specific region. Once activate, click the upper-left corner of the rectangular region you want to be zoomed in on, drag the mouse down the lower-right corner of this region and then release the mouse button.

Zooming In and Out

-  Clicking this button zooms in or out so one can see the entire map.

-  Clicking this button increases the zoom level of the map.

-  Clicking this button decreases the zoom level of the map.

-  This list box allows one to set the zoom level to predefined levels. One can also type in the desired zoom level.

Editing Buttons

-  This button allows one to display or hide the numerical value associated with links.

-  This button allows one to change the size of nodes, links and their associated text. When clicked, a dialog box with four track bars appears. Moving the cursor to the right increases the size of its associated element while moving it to the left decreases its size.

-  Clicking this button deletes the selected nodes and links.

-  Click this button to display a dialog box to change the style, color and size of the selected nodes and links.

-  To retrieve segments associated with a node, select the node and click this button. When

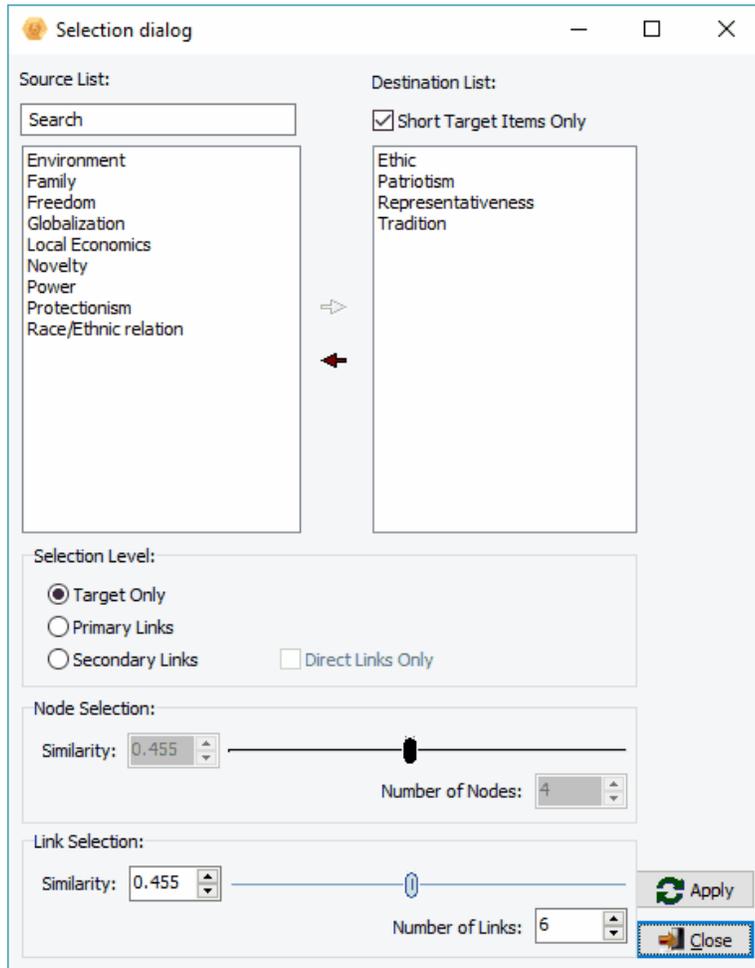
more than one node or when a link is selected, all text segments containing at least two keywords will be retrieved and presented in a table format. One may, however, change the type of segments retrieved (paragraphs, sentences or full documents) or the minimum number of topic items needed for retrieval.

-  This button is used to send a copy of the graph to the clipboard. When this button is clicked, a pop-up menu appears, allowing one to select whether the graph should be copied as a bitmap or as a metafile.
-  Click this button to append a copy of the graph into the Report Manager. A descriptive title will be provided automatically. To edit this title or to enter a new one, hold down the Shift key while clicking this button. (For more information on the Report Manager, see the Report Management Feature topic.)
-  This button allows one to store the displayed network graph in a graphic file. WordStat supports three different file formats: .BMP (Windows bitmap files), .PNG (Portable Network Graphic compressed files) and .JPG (Jpeg compressed files).
-  Clicking this button allows one to print a copy of the displayed graph.

Selecting Nodes and Links

There are four methods available to select nodes to be plotted:

1. **Selecting a Cluster in the Dendrogram Page:** The link analysis graph is initially connected to the **Dendrogram** tab, so that selecting one of its clusters results in its items being represented as nodes on the link graph. The similarity criterion is also automatically set to the value connecting the last item of this cluster to the other elements. To map connections between items of another cluster, simply move back to the **Dendrogram** tab and click anywhere on the new cluster. A smaller version of the link map should appear in the lower-right panel of the **Dendrogram** tab. You may then move back to the **LINK ANALYSIS** tab, or click the  button in the lower-right panel.
2. **Double-Clicking a Node:** When the graph is in selection mode, double-clicking a node will set the node as the target item and will display all nodes associated with it according to the last criterion settings (primary links). All currently displayed nodes not associated with this new target item will be removed. If the Shift key is held down while double-clicking a node, the graph will also include nodes associated by a second degree to the target node (secondary links) as long as they also match the same criterion.
3. **Selecting Nodes and Right-Clicking:** When one or several nodes are selected, right-clicking brings a popup menu that allows one to either **ADD** to the current graph, primary links and secondary links or **REPLACE** the currently displayed nodes with those associated directly (one level) or indirectly (second level) with the selected nodes.
4. **Using the Nodes and Link Filtering Dialog Box:** Clicking the  button on the toolbar displays a dialog box that allows one to manually select items to be graphed. Such a dialog box looks like this:



The following groups of options are available for selecting nodes and links to be plotted:

- Source List** This list box contains all items that are available to be plotted. To include them in a graph, simply move them to the Destination List using the arrow button. A Search edit box at the top of this list allows one to quickly find specific items.
- Destination List** This list box contains items that are currently plotted. When the Show Target Items Only option is clicked, the dialog box will offer the possibility of selecting additional nodes and links based on similarity or proximity criteria. When not checked, the graph will display the connection of only the nodes currently listed. Arrow buttons may be used to remove or add additional items.
- Selection Level** When the destination list is set to include only target items, one may choose whether additional nodes should be plotted and how those will be selected. When set to Target Only, no additional items will be plotted. Clicking Primary Links will allow the selection of additional nodes directly linked to target items based on a similarity criterion. When the Secondary Links option is chosen, additional items may be included if they are indirectly connected to the target nodes through the primary links, as long as they reach the same similarity criteria. By default, all links reaching such a criterion will be plotted, including links among the primary and secondary linked nodes. Selecting Direct Links Only will omit most of those links to keep only the ones that connect them to the target items.
- Node Selection** This set of options allows you to adjust the similarity criterion to be used for selecting additional items. The similarity criteria displayed is the one currently set on the Options tab of the Co-Occurrence section. One can type a specific value (typically between 0 and 1) in the edit box, increase or decrease the value using either the UP or DOWN arrow buttons, or by sliding the cursor on the track bar on the right side of the edit box. The Number of Nodes option is automatically adjusted to indicate how many items meet the current similarity criterion. Editing its value will reciprocally

adjust the similarity criterion.

Link Selection This set of options allows you to adjust the similarity criterion to be used for selecting links to be plotted. The similarity criterion for displaying links should always be equal to or less than the one used for selecting nodes. Reducing this criterion will plot additional links. One can type a specific value in the edit box, and increase or decrease this value using either the UP or DOWN arrow buttons, or the slide track bar on the right of the edit box. The Number of Links option is automatically adjusted to indicate how many links will be plotted. Editing its value will reciprocally adjust the similarity criterion.

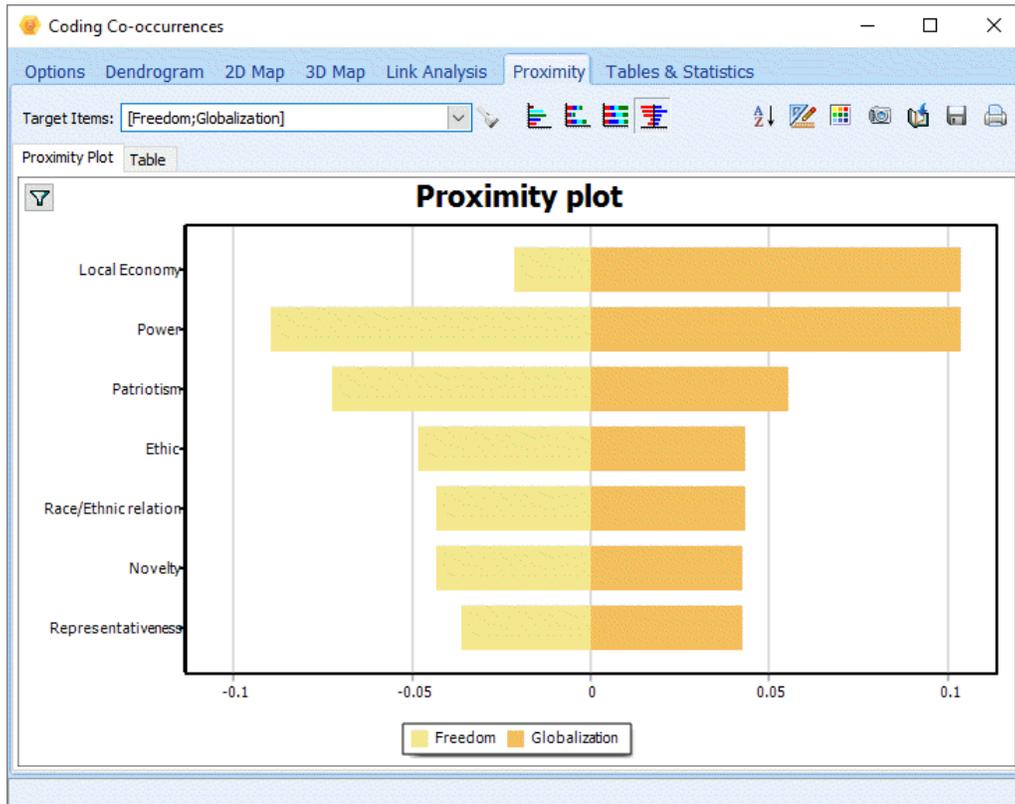
Once the options have been set, click the  button to update the graph and display the selected nodes and links.

Proximity Plot

Cluster analysis and multidimensional scaling are both data reduction techniques and may not accurately represent the true proximity of codes or cases to each other. In a dendrogram, while codes that co-occur or cases that are similar tend to appear near each other, you cannot really look at the sequence of codes as a linear representation of these distances. You have to remember that a dendrogram only specifies the temporal order of the branching sequence. Consequently, any cluster can be rotated around each internal branch of the tree without in any way affecting the accuracy of the dendrogram. The best analogy here is to think of a Calder mobile. Different photos for this type of mobile will yield different distances between hanging objects. While multidimensional scaling is a more accurate representation of the distance between objects, the fact that it attempts to represent the various points in a two- or three-dimensional space may result in distortion. As a consequence, some items that tend to appear together or to be very similar may still be plotted far from each other.

Proximity Plot

The **Proximity Plot** is the most accurate way to graphically represent the distance between objects by displaying the measured distance from a selected object to all other objects on a single axis. It is not a data reduction technique, but a visualization tool to help you extract information from the huge amount of data stored in the distance matrix at the origin of the dendrogram and the multidimensional scaling plots. In this plot, all measured distances are represented by the distance from the 0 point. The zero point represents absence of similarity or co-occurrence.



To select a code or a case that will be used as the point of reference, you can choose from the **Target Items** drop-down checklist located at the top of the page. You can also freely browse through different codes or cases by double-clicking the bars in the **Proximity Plot**. The co-occurrence or similarity to more than one target item may be displayed in a single chart allowing easy comparisons. When several target items are selected, the proximity plot may consist of bars clustered side by side (clustered bars) or stacked (stacked bars), representing either the total amount or the relative distribution of scores (100-percent stacked bars). When two target items are selected, it is also possible to display the bars on both sides of a central axis, like the sample chart shown below (mirrored bars).

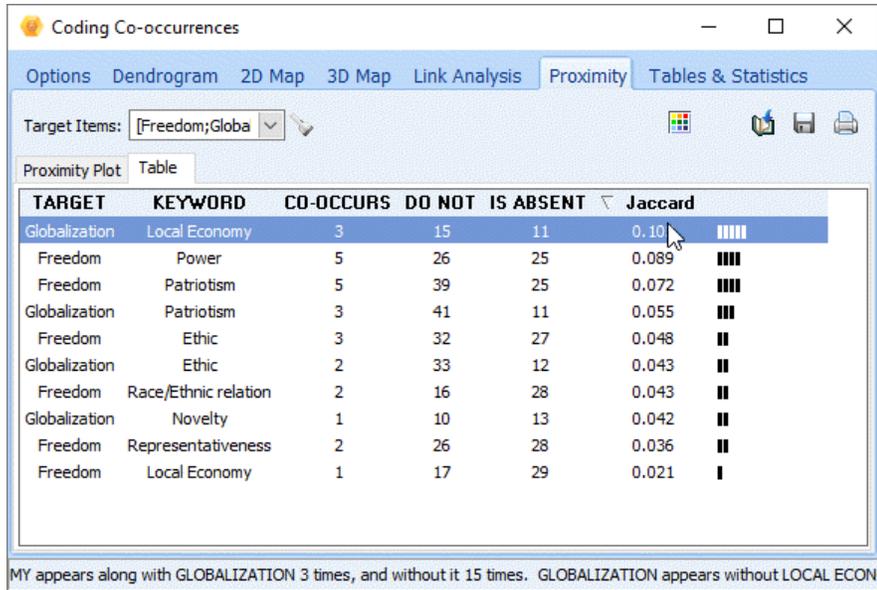
By default, the chart displays the proximity of the target items to a maximum of 30 related items. Clicking the  button located in the upper left-hand corner of the chart displays a dialog box that allows one to either manually choose items to be plotted or to automatically select a specific number of items.

When looking at code co-occurrences, selecting a bar enables the  button. Clicking this button retrieves every pair of coded segments co-occurring, allowing you to further explore the factors that may explain this co-occurrence. Right-clicking any existing bar displays a menu that allows you to remove the selected item, to move it to the list of target items by adding it to the existing bars, or to replace one of them. You may also retrieve documents or text segments using this pop-up menu.

Table

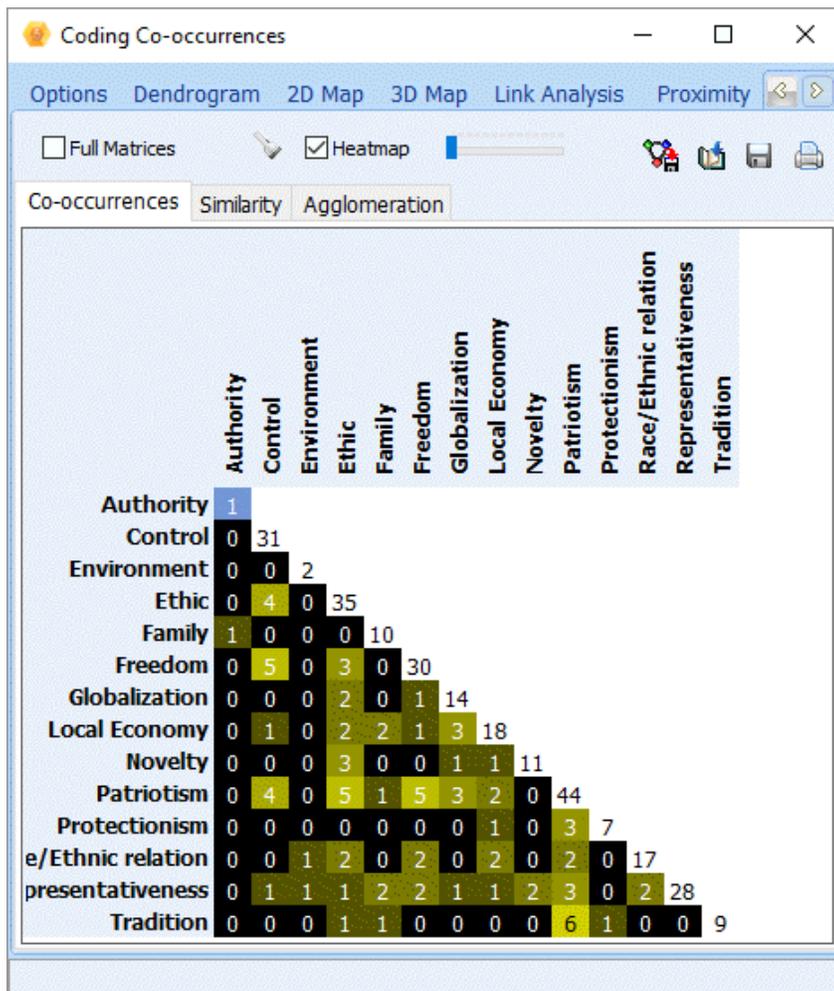
The **Table** tab allows you to examine the numerical values behind the calculation of these plots in greater detail. When the distance measure is based on co-occurrences, the table provides detailed information such as the number of times a KEYWORD co-occurs with the TARGET code (**CO-OCCURS**) and the number of times that it appears in the absence of the TARGET code (**DO NOT**). This table also includes the number of times the TARGET code appears in the absence of the KEYWORD (**IS ABSENT**). In the example below, we can see on the first line of the table that the **Local Economy** code co-occurs 3 times with **Globalization**, but on 15 occasions this code is encountered without the

presence of **Globalization**, while **Globalization** is found to occur 11 times in the absence of **Local Economy**.



Tables & Statistics

The **Tables & Statistics** pages displays the co-occurrence and similarity matrices used for building the dendrogram, MDS plots, as well as the proximity plot and table.



The first two tabs display by default only the lower triangular part of the matrix of co-occurrence and similarity. Selecting the **Full Matrix** option will display data on both sides of the diagonal.

When analyzing coding co-occurrences, it is possible to use the co-occurrence matrix to retrieve specific pairs of co-occurring coded segments by selecting the cell region and then clicking the  button.

To export a matrix to social network analysis software tools:

- Select the matrix you would like to import by activating either the Co-occurrences or the Similarity page.
- Click the  button.
- In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: UCINET file (*.DL), Pajek Network file (*.NET), NetDraw file (*.VNA) and NetMiner file (*.SNF).
- Type a valid file name with the proper file extension.

- Click the **SAVE** button.

To append a copy of the table in the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.
- To append only a single hit from the table, select the row containing the text segment you want to append to the Report Manager and click the  button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear.
- In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV) and Stata data files (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.
- Type a valid file name with the proper file extension.
- Click the **Save** button.

To print the table:

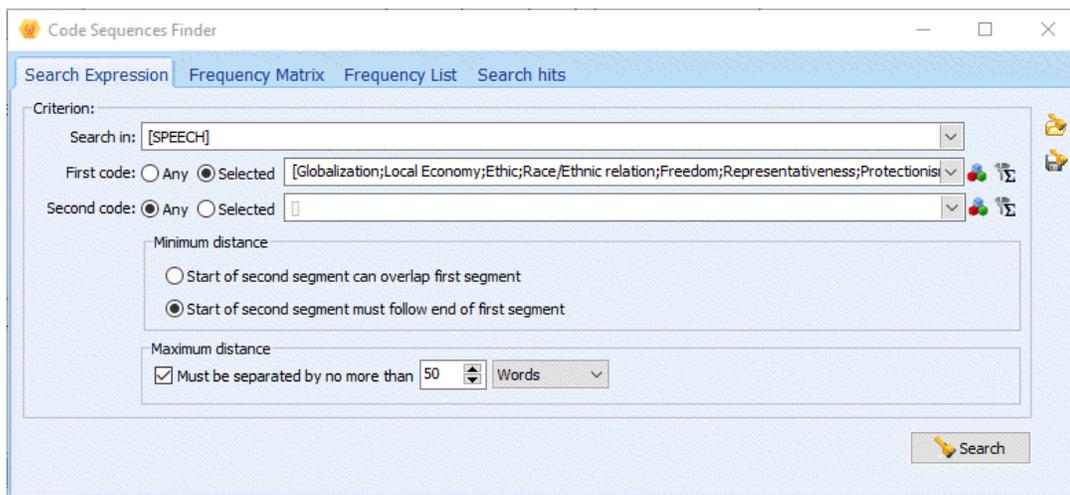
- Click the  button.

Code Sequence Analysis

While [Coding Co-Occurrence](#) analysis looks at the concomitant presence of codes regardless of their order of appearance in the documents, the **Code Sequences** function is used to identify codes that not only co-occur, but do so in a specific order and under specific conditions. This command lists the frequency of all sequences involving two selected sets of codes as well as the percentage of time one code follows or is followed by another.

To search for code sequences:

- Select the **CODING SEQUENCES** analysis from the **ANALYZE** menu. A dialog box similar to the one below will appear:



Search Expression

The first tab of the dialog box is used to restrict the analysis to specific document variables or specific codes and to set the conditions that must be met to determine whether a code follows another one.

Search in: This option allows you to specify on which document variable the analysis will be performed. If the current project contains more than one document variable, you will have a choice of selecting either one or more of them. By default, all document variables are selected. To restrict the analysis to a few of them, click the down arrow key at the right of the list box. A list of all available document variables will appear. Select the variables in which you want the search to be performed.

First code and **Second code:** These two options allow you to select which specific code sequences will be analyzed. By default, the analysis is performed on all codes in the codebook, providing you with a comprehensive list of all sequences found in the documents. The list of sequences can, however, be limited by restricting either the leading or the following codes. For example, if someone is interested in the reactions of a therapist to client verbalizations, he may set the **First Codes** option to include only the codes used to describe client verbalizations and limit the codes in the **Second Codes** option to those used to describe the therapist's reaction. You can select specific codes for these two options either from the corresponding drop-down checklist by clicking the arrow button or from a tree representation of the codebook by clicking the  button. You may also select codes based on a minimum frequency criteria by clicking the  button.

Minimum distance: This option is used to specify whether two codes will be considered to form a sequence when they partially overlap. If the first option is selected, a code can be considered as following the first code despite the fact that the text segment to which it was assigned starts before the

end of the segment associated with the first code. However, if the second radio button is selected, QDA Miner will not consider these overlapping codes to be code sequences. For example, in the following example:



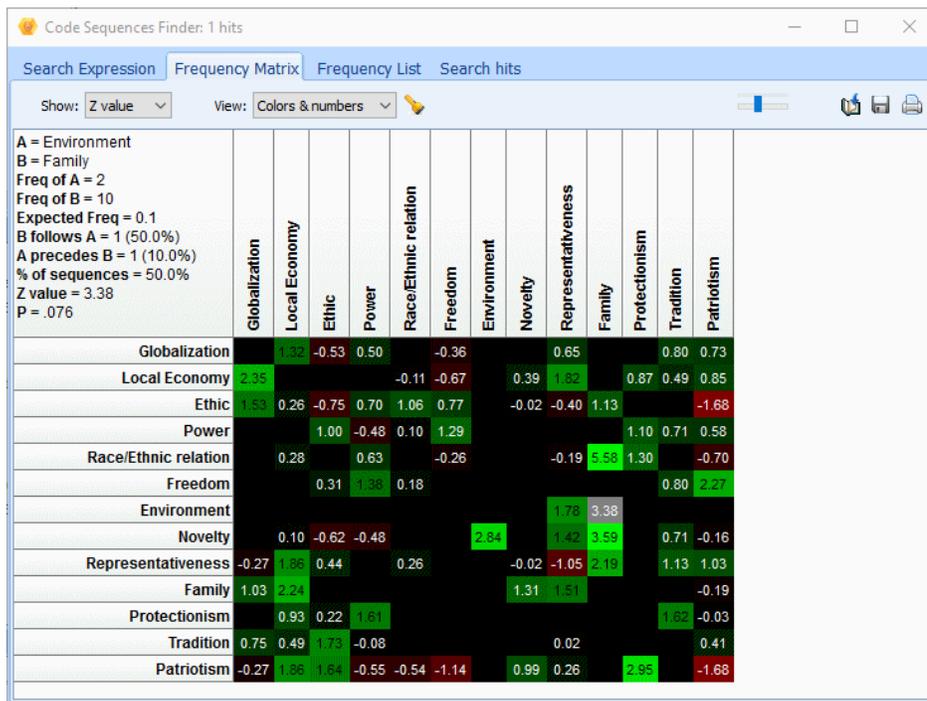
If the option is set to **Start of second segment can overlap the first segment**, then QDA Miner will treat the *Local Economy* and *Free Trade* codes as a valid sequence. If the **Minimum Distance** option is set so that the start of the second code must follow the end of the first one, then the same pair of codes will not be considered as a sequence and will not be included in the results table.

Maximum distance: This option is used to specify what should be the maximum distance separating two codes in order to consider them to form a sequence. If disabled, QDA Miner will consider a code to follow another one as long as it is in the same document and meets the minimum distance criteria (see above). When enabled, code sequences are restricted to codes separated by no more than a predefined distance. This distance is calculated from the end of the first coded segment to the beginning of the second coded segment and can be measured either in number of characters, words, or paragraphs, or alternatively by setting a maximum number of codes that can occur between them. If the minimum distance is set to zero code, then only the codes following immediately the first code will be considered to be a sequence.

- To store the search expression and options, click the  button and specify the name under which those query options will be saved.
- To retrieve a previously saved query, click the  button and select from the displayed list the name of the query you would like to retrieve (for more information, see [Saving and Retrieving Queries](#)).
- Once the criteria have been properly set, click the  button to find all sequences meeting those criteria. If at least one sequence is found, the **Frequency Matrix** and **Search Hits** page become enabled.

Frequency Matrix

The **Frequency Matrix** tab shows a matrix of all code sequences found in the document. The starting code (code A) in the A-B sequence is shown on the left side, while the code that follows (code B) is displayed at the top.



By default, the matrix displays the **z-values** of all sequences. In this example, colors are used to represent deviation from the expected frequency. Cells in green represent sequences occurring more often than expected, while cells in red represent sequences occurring less often. The brighter the color is, the farther it is from the expected frequency and the less likely such a sequence can be attributed to chance.

Show: This list box allows you to display other statistics. The following sequence statistics are available:

- Frequency of A followed by B
- Frequency of B followed by A
- Percentage of A followed by B
- Percentage of B followed by A
- Percentage of sequences equal to AB
- Z-value
- Probability

While a red-green color pattern is used to represent different z-values, a black-yellow gradient pattern is used for all the other options. For most options, except probability, the higher the value, the brighter the cell. For probability matrices, the reverse is true: the lower the probability, the brighter the cell.

The  control on the toolbar allows you to adjust the brightness of the color pattern, and thus increase or decrease the contrast between specific values.

View: This list box may also be used to remove the color pattern and display only numerical values, or hide numerical values and display only color patterns.

The top left section of the matrix displays for the currently selected cell (displayed with a gray background) the following information:

- A=** The name of the first code in the sequence
- B=** The name of the second code in the sequence
- Freq of A** The number of times that the first code occurs.
- Freq of B** The number of times that the second code occurs.
- B follows A** The number and percentage of times that the second code follows this first code.

- A precedes B** The number and percentage of times that the first code appears before the second code.
- % of Sequences** The percentage of all sequences equal to the current sequence.
- Z values** A standardized measure of the deviation from the expected frequency.
- P=** The probability that this deviation occurs by chance.

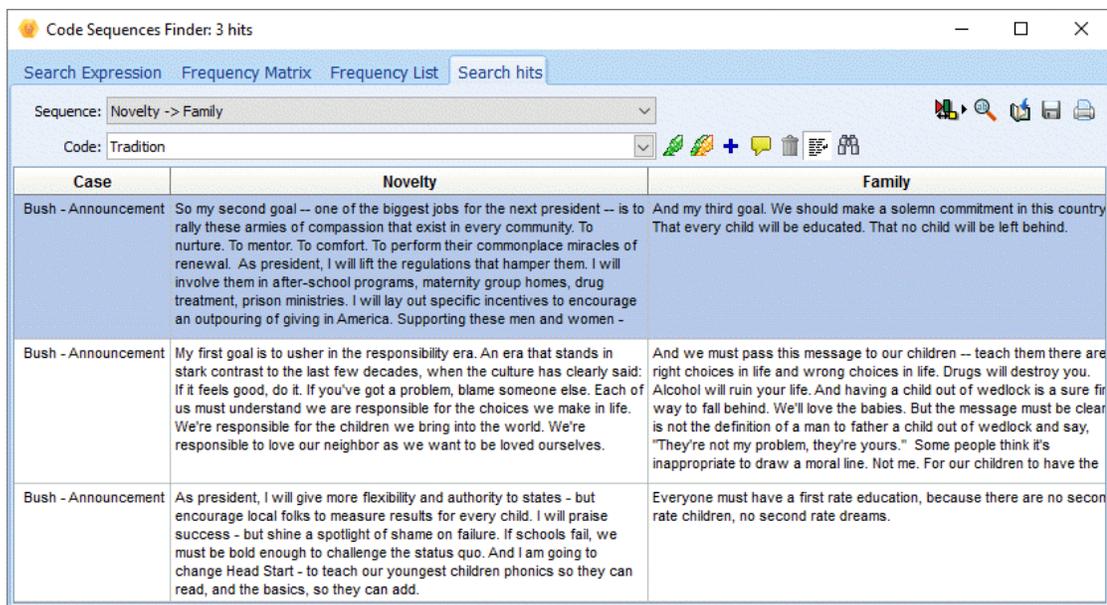
To display the list of text segments associated with a specific code sequence, select the cell representing the sequence you would like to examine, and click the  button. Double-clicking this cell also moves you to the **Search Hit tab** and displays the associated text segments.

Frequency List

This tab contains a table with the statistics for all observed sequences. Clicking any column header sorts the rows in ascending order of values found in this column. Clicking the same column header a second time sorts the table in descending order.

Search Hits

The **Search Hits** page allows you to examine in more detail the text segments associated with specific code sequences.



| Case | Novelty | Family |
|---------------------|--|---|
| Bush - Announcement | So my second goal -- one of the biggest jobs for the next president -- is to rally these armies of compassion that exist in every community. To nurture. To mentor. To comfort. To perform their commonplace miracles of renewal. As president, I will lift the regulations that hamper them. I will involve them in after-school programs, maternity group homes, drug treatment, prison ministries. I will lay out specific incentives to encourage an outpouring of giving in America. Supporting these men and women - | And my third goal. We should make a solemn commitment in this country That every child will be educated. That no child will be left behind. |
| Bush - Announcement | My first goal is to usher in the responsibility era. An era that stands in stark contrast to the last few decades, when the culture has clearly said: If it feels good, do it. If you've got a problem, blame someone else. Each of us must understand we are responsible for the choices we make in life. We're responsible for the children we bring into the world. We're responsible to love our neighbor as we want to be loved ourselves. | And we must pass this message to our children -- teach them there are right choices in life and wrong choices in life. Drugs will destroy you. Alcohol will ruin your life. And having a child out of wedlock is a sure fire way to fall behind. We'll love the babies. But the message must be clear is not the definition of a man to father a child out of wedlock and say, "They're not my problem, they're yours." Some people think it's inappropriate to draw a moral line. Not me. For our children to have the |
| Bush - Announcement | As president, I will give more flexibility and authority to states - but encourage local folks to measure results for every child. I will praise success - but shine a spotlight of shame on failure. If schools fail, we must be bold enough to challenge the status quo. And I am going to change Head Start - to teach our youngest children phonics so they can read, and the basics, so they can add. | Everyone must have a first rate education, because there are no second rate children, no second rate dreams. |

To select the code sequence to display, select its name from the **Sequence** list box. Selecting an item in this table, either by clicking its row or by using keyboard cursor keys such as the **Up** or **Down** arrow keys automatically displays the corresponding case and document in the main window. This feature provides a way to examine the retrieved segments in their surrounding context.

To assign code to a specific search hit:

- In the table of search hits, select the row corresponding to the text segment you want to code.
- Use the **CODE** drop-down list located above this table to select the code you want to assign.
- Click the  button to assign the selected code to the highlighted text segment.

To assign a code to all search hits:

- Use the **CODE** drop-down list located above this table to select the code that you want to assign.
- Click the  button to assign the selected code to all text segments meeting the search expression.
- Prior to the assignment of a code to all search hits, you may want to remove selected hits that do not correspond to what you were looking for. To remove a search hit from the list, select its row and then click the  button.

To display the automatic text classification panel:

- Click the  button. A panel will appear at the bottom of this hit list, allowing you to apply an automatic text classification model on the retrieved text segments. Clicking this button again, will hide the panel.

For more information on this feature, see [Automatic Text Classification](#).

To analyze the text of all retrieved segments using WordStat:

- Click the  button. QDA Miner will minimize itself and run WordStat, allowing you to perform a quantitative content analysis or apply text-mining techniques on the retrieved text segments. WordStat will also allow you to perform keyword comparisons across any other column in the table. To include additional data for comparison analysis, use the **Add Variables** option.

To append a copy of the table in the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.
- To append only a single hit from the table, select the row containing the text segment you want to append to the Report Manager and click the  button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear. The **Frequency Matrix** or the **Search Hits** list may be saved to disk in Excel, plain ASCII, text delimited, MS Word, HTML or XML format.
- Type a valid file name with the proper file extension.
- Click the **Save** button.

To print the table:

- Click the  button.

Coding by Variables

The **CODE BY VARIABLES** function is used to explore the relationship between codes assigned to documents and subgroups of cases defined by values of a numeric or categorical variable. When performing these kinds of analyses, QDA Miner displays a contingency table containing either codes frequencies, code occurrences (present or absent), or either absolute or relative importance (in number or percentage of words). This dialog box also gives you access to several graphical and statistical tools to help you assess or view the strength of the relationship between code usage and the selected variable.

To access the coding by variables function:

- Select the **CODING BY VARIABLES** from the **ANALYZE** menu. A dialog box similar to the one below will appear:

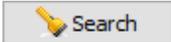
| | Bradley | Buchanan | Bush | Forbes | Gore | McCain | F-test | P value |
|----------------------|---------|----------|-------|--------|-------|--------|--------|---------|
| Topics | | | | | | | | |
| Economic | | | | | | | | |
| Globalization | 4.8% | 5.4% | 4.3% | 10.5% | 5.8% | 2.8% | 0.309 | .891 |
| Local Economy | 9.5% | 8.1% | 5.7% | 0.0% | 9.6% | 2.8% | 0.411 | .826 |
| Social | | | | | | | | |
| Ethic | 4.8% | 13.5% | 20.0% | 15.8% | 11.5% | 13.9% | 1.847 | .238 |
| Power | 0.0% | 13.5% | 15.7% | 15.8% | 11.5% | 16.7% | 0.674 | .659 |
| Other | | | | | | | | |
| Environment | 2.4% | 0.0% | 0.0% | 0.0% | 1.9% | 0.0% | 0.800 | .588 |
| Values | | | | | | | | |
| Liberal | | | | | | | | |
| Freedom | 2.4% | 0.0% | 11.4% | 10.5% | 19.2% | 25.0% | 0.984 | .497 |
| Novelty | 2.4% | 0.0% | 8.6% | 10.5% | 3.8% | 0.0% | 1.192 | .412 |
| Race/Ethnic relation | 11.9% | 5.4% | 1.4% | 0.0% | 17.3% | 2.8% | 0.870 | .551 |
| Representativeness | 28.6% | 8.1% | 5.7% | 21.1% | 7.7% | 2.8% | 1.157 | .425 |
| Conservative | | | | | | | | |

Search in: This option allows you to specify on which document variables the analysis will be performed. If the current project contains more than one document variable, you will have a choice of selecting either one of them or a combination of them. By default, all document variables are selected. To restrict the analysis to a few of them, click the down arrow key at the right of the list box. You will be presented with a list of all available document variables. Select the variables on which you want the search to be performed.

Codes: This option allows you to select which codes will be analyzed. By default, the analysis is performed on all codes in the codebook. You can select specific codes either from a drop-down checklist by clicking the arrow button or from a tree representation of the codebook by clicking the button. You may also select codes based on a minimum frequency criteria by clicking the button.

Tabulate with: This option list all numeric and categorical variables available in the project. Selecting any variable name will display a contingency table so that you can assess the relationship between this variable and the codes assigned to text segments. You can also

combine values of two variables by selecting the **<combine...>** list box option. When this option is selected, you will be presented with a dialog box that will let you choose the two variables you wish to combine.

- Once these options are set properly or when they are modified, click the  button to perform the analysis. The results are displayed in two different formats, a tree grid format replicating the structure of the codebook and a table format.
- To display column labels vertically on the table, click the  button located on the right of the **Tabulate With** list box.
- To store the search expression and options, click the  button and specify the name under which the query options will be saved.
- To retrieve a previously saved query, click the  button and select from the displayed list the name of the query you would like to retrieve (for more information, see [Saving and Retrieving Queries](#)).

The remaining options are used to specify the information that should be displayed in the table or tree grid.

Count: This option allows you to select which indicator will be used to quantify the importance of codes. Four indicators are available:

Code occurrence (case): Allows you to compare the number of cases in which at least one instance of this code appears. If a code is used more than once in the same case, it will be counted only once.

Code frequency: The total number of times a code has been used.

Word count: The total number of words that have been assigned to a specific code.

Percentage of words: The word count divided this by the total number of words found in those documents.

Display: This list box allows you to specify the information displayed in the table. The following options are available:

- Count
- Row Percent
- Column Percent
- Total Percent

When the **Count** option is set to **Code occurrence**, two additional statistics become available:

- Category percent (percentage of cases or individuals in this subgroup)

Statistic: This list box allows you to choose among 11 association measures to assess the relationship between the numeric or categorical variable and the codes.

Nominal level statistics

- Chi-square
- F-test

Ordinal or internal level statistics

- Tau-a

- Tau-b
- Tau-c
- Somers' D (symmetric)
- Somers' Dxy (asymmetric)
- Somers' Dyx (asymmetric)
- Gamma
- Spearman's Rho
- Pearson's R

Probability: The probability option allows you to select whether the probability value should be calculated using a 1-tailed or 2-tailed test. Probabilities of Chi-square, Likelihood ratio, and Student's F are always computed using a 2-tailed test.

After a first crosstabulation table has been obtained, additional buttons located on top of this dialog box will become available. These buttons are used to create bar charts or line charts representations of data in selected rows, perform correspondence analyses, or create heatmaps. You will find below short descriptions of the steps needed to access these features.

Working with the tree grid:

The  button allows you to produce bar charts or pie charts to visually display the distribution of specific codes. To produce charts:

- To select codes to chart, click the  button to display checkboxes, and then check all codes you want to plot.
- Click the  button.

Click the  button to copy an image of the tree grid to the clipboard. The image may be stored either in bitmap or in Windows Metafile format.

Working with the table:

To sort the table in ascending order on any column value, simply click the column header. Clicking a second time on the same column header sorts the rows again in descending order.

When statistics are shown in the table, the  button allows one to produce various charts such as bar charts, line charts, area charts, etc to visually display the distribution of specific codes across values of the categorical variable. To produce charts:

- Sort the columns in the order you want the values to be shown graphically.
- Select the rows you would like to plot (multiple but separate rows can be selected by clicking the desired rows while holding down the **Ctrl** key)
- Click the  button.

For more information, see [Charting Relationships with Variables](#).

The following functions can be performed regardless if you are viewing the table or tree grid format:

To use the mapping feature:

- Click the  button to access the mapping function, which allows you to analyze the spatial distribution of various codes.

To search for selected coded segments:

- Select the cells that contain the data for which you would like to retrieve associated coded segments.
- Right-click and choose the **RETRIEVE SEGMENTS** command.

You may also select entire rows by right-clicking anywhere in the table and enabling the **Row Select** option. When enabled, multiple but separate rows can be selected by clicking while holding the **Ctrl** key down.

All retrieved segments will be displayed in a separate dialog box. For more information on the various options of this dialog box, see [Using the Coding Retrieval Dialog Box](#).

To create bubble charts:

Bubble charts are graphic representations of contingency tables where relative frequencies are represented by circles of different diameters.

- Set the **Tabulate with**, **Count** and **Display** options so that the information to view is displayed in the table.
- Click the  button.

For more information, see [Bubble Charts](#).

To create heatmaps with clustering of rows and columns:

A heatmap plot is a graphic representation of crosstab tables where cell frequencies are represented by different color brightness or tones. When combined with clustering of rows and/or columns, this exploratory tool allows you to identify functional relationships between specific codes and subgroups defined by values of the independent variable. To create a heatmap:

- Set the **Tabulate with**, **Count** and **Display** options so that the information to view is displayed in the table.
- Click the  button to access the heatmap dialog box.

For more information on heatmaps, see [Heatmap plot](#).

To perform a correspondence analysis:

Correspondence analysis is an exploratory technique that provides a graphic overview of relationships in large crosstabulation tables of frequency. To perform a correspondence analysis:

- Set the **Tabulate with**, **Count** and **Display** options so that the information to view is displayed in the table.
- Click the  button to access the correspondence analysis dialog box.

For more information on correspondence analysis, see [Correspondence Analysis](#).

To analyze coding information with Tableau visualization software:

- Select the codes and document variables from which you want to extract coding statistics.
- Click the  button to export coding statistics along with other variables to Tableau data visualization tool.

For further information see [Exporting to Tableau](#).

To obtain a deviation table of the displayed data:

A deviation tab allows one to easily identify codings more frequently or less frequently associated with specific values of a categorical variables. To create a deviation table:

- Set the **Count** option to display the data on which to perform the comparison.
- Click the  button. A dialog box with a deviation table should appear.

For further information, see [Deviation Table](#).

To print or export a crosstabulation table:

- The crosstabulation table may be saved to disk in Excel, plain ASCII, text delimited, MS Word, HTML, or XML format by clicking the  button.
- To append the table to the Report Manager, click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.
- You may also print this table by clicking the  button.

Charting Relationships with Variables

The chart window allows you to graphically examine the relationship between codes and values of an independent variable. Six types of chart can be obtained from this dialog box.

 The **vertical bar chart** can be used to display the distribution of various categories within subgroups as defined by a nominal independent variable. Bar charts are easy to read since one can easily compare the heights of the bars.

 The **Horizontal bar chart** has the same advantage as the vertical bar chart. The horizontal orientation provides a way to accommodate longer category labels without the need to change their text orientation.

 The **stacked bar chart** allows one to display relative or absolute frequency of items by stacking them for each other class, It allows one to quickly show the relationship of parts to the whole or to emphasize a sum of several codes

 The **100% stacked bar chart** is designed to show the relative percentage of multiple data series in stacked bars, where the total of each stacked bar always equals 100%. Like a pie chart, a 100% stacked bar chart shows a part-to-whole relationship.

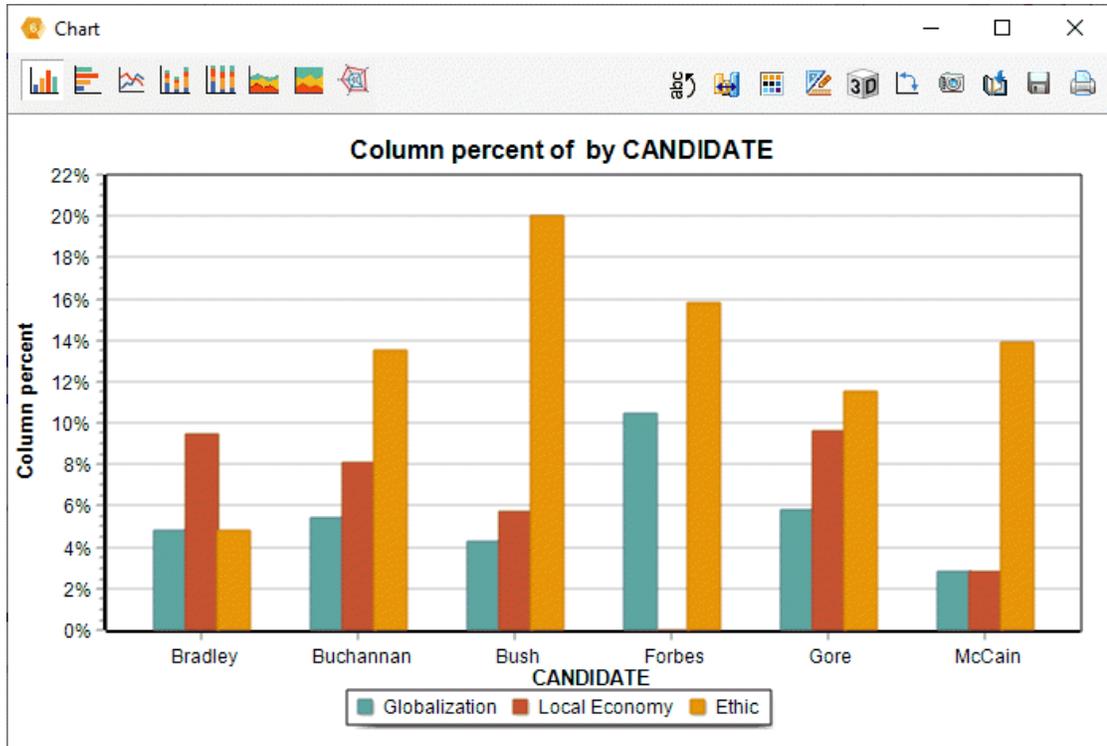
 The **line chart** may be preferred for the examination of the relationships between these categories and an ordinal or quantitative variable. It is especially useful when looking for trends over time.

 The **stacked area** chart is similar to a line chart with the areas below the lines filled with colors.

The stacked version of the area chart allows one to display the contribution of various elements to a total over time.

 The **100% stacked area chart** is similar to the stacked area chart with the difference that each value of the horizontal axis is adjusted so that the cumulative area always represents 100%. It is thus appropriate to display the evolution of the contribution of various elements to a total over time.

 The **Radar Chart** represents all categories of a variable on a different axes. The origin of each axis of the radar chart is located at the center of the chart so that the higher frequency extends the plotted area farther toward the edge of the chart. The resulting geometric shapes illustrate the overall distribution of all categories.



To search for selected text segments:

- Right-click on the bar corresponding to the code and the specific value for which you would like to retrieve associated coded segments.
- Select the **RETRIEVE SEGMENTS** command. All retrieve segments will be displayed in a separate dialog box. For more information on the various features available from this dialog box, see [Using the Coding Retrieval Dialog Box](#).

To remove specific series:

- Right-click on any bar corresponding either to the code or to the specific value you would like to remove.
- The popup menu will display two **REMOVE** commands, one of them for removing a specific code, while the other one for removing all bars associated with a specific value. Select the one associated with what you would like to delete.

The Toolbar

The following table provides a short description of the available buttons and controls:

| Control | Description |
|---|--|
|  | Press this button to vertically display the labels on the bottom axis. |
|  | Clicking this button allows you to manually reorder series and bars within a series. It may be used to place bars in ascending or descending orders of frequency, move high frequency series in a back of a 3D chart, so as to make the other lower frequency series more visible. When used with radar charts, it may allow one to produce easier to read geometric shapes. |
|  | Press this button to change the default color palette used for various series of the chart. |
|  | This button allows the editing of various features of the chart such as the left and bottom axes, the chart and axes titles, the location of the legend, etc. (see Chart Options Dialog Box) |
|  | Click this button to turn on/off the 3D perspective for the current chart. |
|  | Clicking this button causes the values represented on the bottom axis to be switched with those represented by different lines or bars (legend). |
|  | This button creates a copy of the chart to the clipboard. When this button is clicked, a shortcut menu appears allowing you to select whether the chart should be copied as a bitmap or as a metafile. |
|  | Press this button to append a copy of the graphic in the Report Manager. A descriptive title will be provided automatically. To edit this title or to enter a new one, hold down the SHIFT keyboard key while clicking this button. |
|  | Click this button to save a chart on disk. Charts may be saved in BMP, JPG or PNG graphic file formats. |
|  | Clicking this button prints a copy of the displayed chart. |

Chart Options Dialog Box

The various options in this dialog box are used to customize the appearance of bar charts and line charts. The options available in this dialog box represent only a small portion of all settings available.

Left and Bottom Axis

Minimum / Maximum: QDA Miner automatically adjusts the vertical axis scale to fit the range of values plotted against it. To manually set these values, enter the desired minimum and maximum.

Increment: Increasing or decreasing this value affects the distance between numbers as well as tick marks. Horizontal grid lines are also affected by changing of this value.

Horizontal Grid: This option turns horizontal grid lines on and off. Grid lines extend from each tick mark on an axis to the opposite side of the graph. To increase or decrease the number of grid

lines or the distance between these lines, change the Increment value of the axis. A list box also allows a choice among five different line styles to draw grid lines.

Legend

Location: This option positions the legend. Legends may be placed at the Top, Left, Right and Bottom side of the chart.

From top: When the legend is displayed on the left or the right side of the chart, this option specifies the legend's top position in percent of total chart height.

From left: When the legend is displayed on the top or the bottom chart, this option specifies the legend's top position in percentage of total chart height.

Titles

Proper titles and axis labels are of utmost importance when describing the information displayed in a chart. By default, QDA Miner uses variable names and labels as well as other predefined settings to provide descriptions.

The title page allows you to modify the **top** title, as well as the labels on the **left**, **bottom** and **right** axes. To edit the title, select the proper radio button. Enter several lines of text for each title by pressing the **<Enter>** key at the end of a line before entering the next line.

The **Font** button on the right side of the edit box changes the font size or style of the related title.

3D View

Orthogonal: Turning this option off disables the free elevation and rotation of the 3D chart.

Zoom: This option zooms in and out of the whole chart. Expressed as a percentage, This value, when increased, positively will bring the chart towards the viewer, increasing the overall chart size as the Zoom value increases.

3D Percent: The 3D Percent property indicates the size ratio between chart dimensions and chart depth by specifying a percent number from 1 to 100.

Perspective: Use this property with **Orthogonal** unchecked to change the 3D perspective of the Chart. Larger values add more depth perspective.

Bar shadow: Enabling this option dark-shades the sides of 3D bars. Turning it off will paint the sides of the bar the same color as the front of the bar.

Bar width: This option determines the percent of total bar width used. Setting this value to 100 joins the bars.

Bar depth: Use this property to limit the depth that each bar series uses. By default, bars will take up the part proportional to the number of bar series in the chart so that the back of a bar will join the front of the bar immediately behind it. To insert a gap between a series of bars, decrease this value.

To further customize the chart, edit data points, value labels, or series order, click the  button located on the right side of the dialog box.

Heatmap Plot

Heatmap plots are graphic representations of crosstab tables where relative frequencies are represented by different color brightnesses or tones and on which a clustering algorithm is applied to reorder rows

and/or columns. This type of plot is commonly used in biomedical research to identify gene expressions. When used in qualitative analysis, this exploratory data analysis tool facilitates the identification of functional relationships between related codes and groups of values of an independent variable by allowing the perception of cells clumps of relatively high or low frequencies or of outlier values.

The heatmap plot implemented in QDA Miner allows you to graphically examine the relationship between codes (rows) and values of an independent variable (columns). While the clustering available through the **CODING CO-OCCURRENCES** command (see [Hierarchical Clustering and Multidimensional Scaling](#)) is performed on individual documents, the clustering analyses used in the heatmap plot are performed directly on the crosstabulation tables. As a consequence, the similarity index calculated for two codes and used for clustering does not represent their co-occurrences within cases, but measures the similarity of their distribution among the various groups of the independent variable. Likewise, two subgroups defined by values on the independent variable will be considered near to each other if the distributions of codes in those two groups are similar.

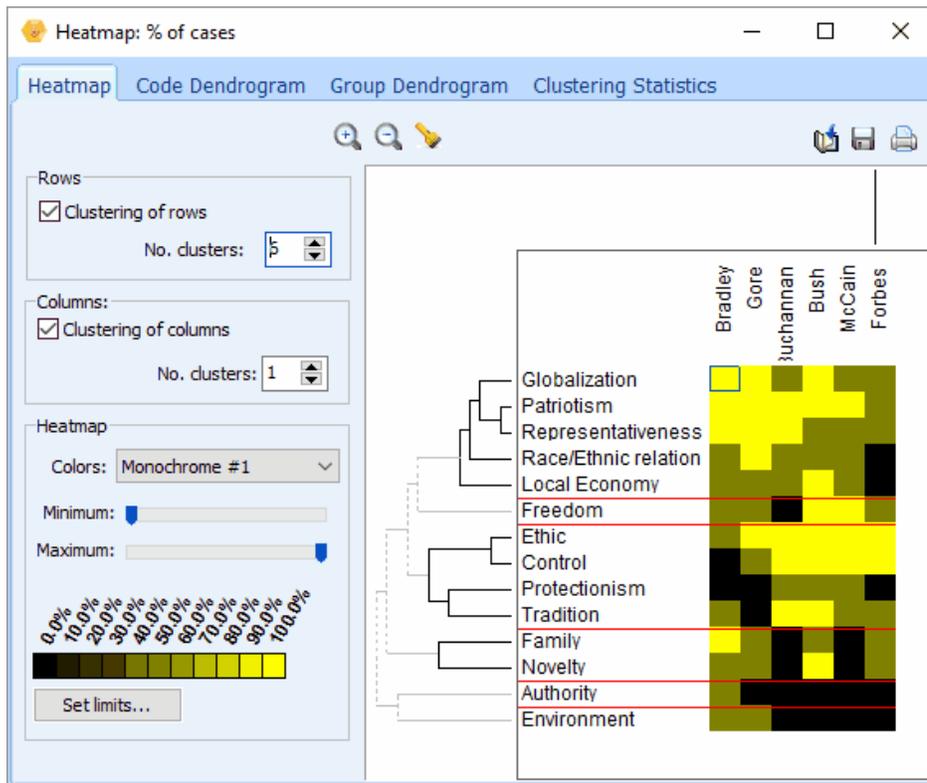
The heatmap plot can be performed on any of the available statistics (Code Occurrence, Code Frequency, Word Count, or Percentage of Words). For all these types of analyses, the observed frequency is transformed into a percentage by dividing the observed value by an appropriate statistic calculated for each subgroup of cases.

To create a heatmap:

- Select the **CODING BY VARIABLES** command from the **ANALYSIS** menu.
- Select the codes that you want to plot along with the documents to which you wish to restrict the analysis.
- Set the **CROSS WITH** option to the desired independent variable.
- Set the **COUNT** option to either Code Occurrence, Code Frequency, Word Count or % of Words.
- Click the  button to construct the crosstab matrix.
- Click the  button.

Heatmap Tab

The main section on the right of this page, as shown in the screen shot below, displays the heatmap grid representing the relative frequencies of each cell (row and column intersection) using different brightnesses or color tones. Optional dendrograms are displayed at the top and at the left margin of this grid. The size of these dendrograms may be adjusted by moving the mouse cursor over the bottom edge (upper dendrogram) or the right edge (dendrogram on the left) of the dendrogram and dragging its limit to the desired size.



The font size used to display the row and column values may also be adjusted by clicking the  or  buttons located on the top toolbar. The size of cells and the distance between dendrogram leaves are automatically adjusted to the new font size.

Rows options group

Clustering of rows: Enabling this option reorders the rows based on the result of a cluster analysis and displays a dendrogram to the left of the heatmap plot. Codes that are distributed across the various subgroups in a similar way will tend to be grouped under the same cluster.

Sort by: When code clustering is disabled, rows may be sorted in alphabetical order, in descending order of frequency or case occurrence or displayed in their original codebook order.

No. clusters: This option allows you to set how many clusters the clustering solution should have. When two clusters or more are selected, horizontal red lines are drawn in the heatmap to delineate these clusters.

Columns options group

Clustering of columns: Selecting this option reorders the columns based on the result of a cluster analysis and display a dendrogram at the top of the heatmap. Columns with similar distribution of codes will tend to be grouped under the same cluster. When this clustering option is disabled, the columns are presented in their ascending order of values. Disabling the clustering of columns is especially useful to preserve the ordinal nature of the values. For example, when looking for a relationship between some codes and publication years, then disabling the clustering of columns will automatically sort those columns in chronological orders allowing the identification of temporal trends.

No. Clusters: This option allows you to set how many clusters the clustering solution should contain. When two clusters or more are selected, vertical red lines are drawn in the heatmap to delineate these clusters.

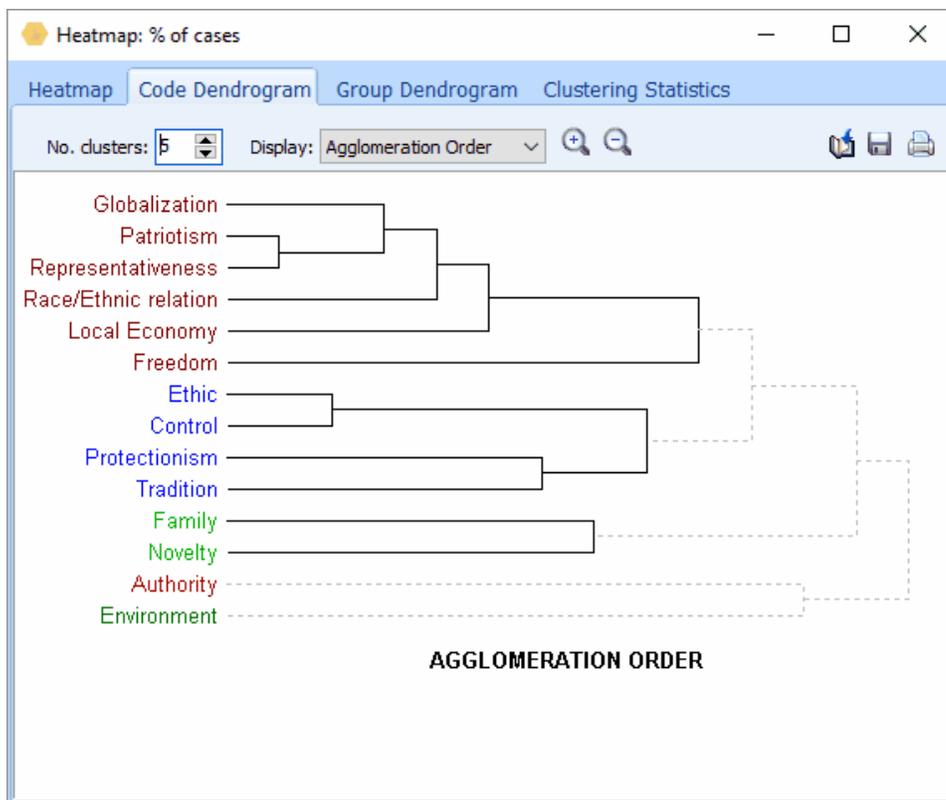
Heatmap options group

Colors: The colors list box allows the selection of various color schemes to represent differences in percentages. Monochrome schemes will express differences using levels of brightness for a single color where black always represents the lower limit of the selected range. Multicolor spectrums may be used to represent greater nuances in the selected range of percentages.

Minimum/Maximum: The minimum and maximum slide bars allows you to set the range of values that will be used to display variations of color tones or brightness. By default, the minimum value is set to zero while the maximum value is set to the highest observed percentage. To increase the contrast at a specific location of this range, minimum and maximum limits may be adjusted. All cells with values lower than the minimum will be represented with the color located at the left end of the selected color spectrum, while cells with percentages higher than the maximum limit will be displayed with the color locate at the right end of this spectrum. Reducing the range of values increases the contrast in a specific region of percentage values.

Code and Group Dendrogram Tabs

The second and third tabs of the heatmap dialog box provide a more detailed examination of the clustering of codes (Code Dendrogram) and of all values on the independent variable (Group Dendrogram). QDA Miner uses an average-linkage hierarchical clustering method to create clusters from a similarity matrix. The result is presented in the form of a dendrogram (see below), also known as a tree graph. In this type of graph, the vertical axis is made up of the items and the horizontal axis represents the clusters formed at each step in the clustering procedure. Items that tend to be distributed similarly against the other variables appear together and are combined at an early stage, while those that have dissimilar distributions tend to be combined at the end of the agglomeration process.



No. clusters: This option sets how many clusters the clustering solution should have. Different

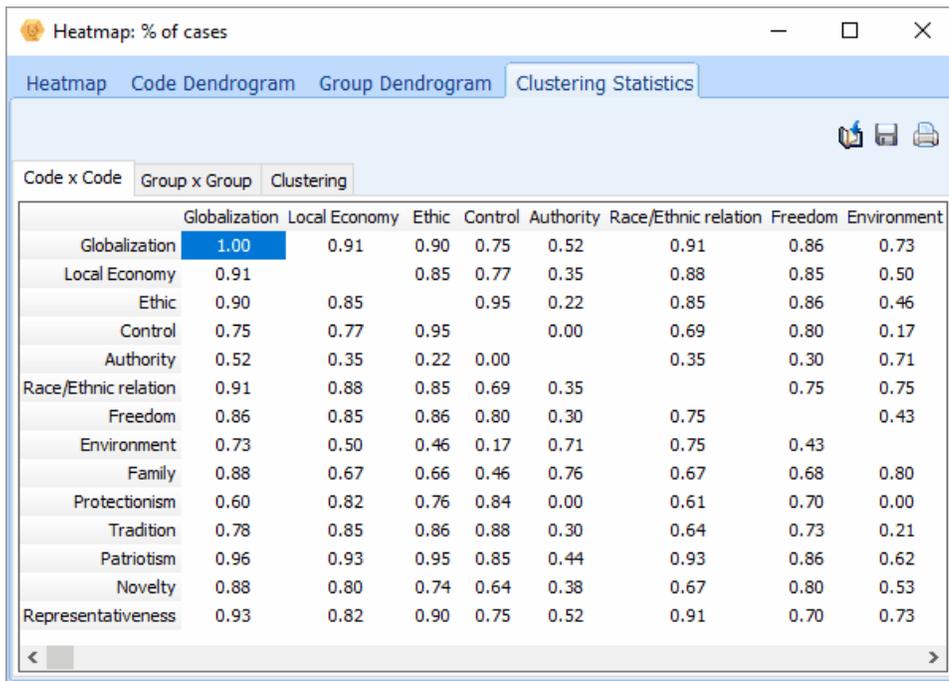
colors are used in the dendrogram to indicate membership of specific items in different clusters.

Display: This option sets whether the vertical lines of the dendrogram represents the agglomeration schedule or the similarity indices.

At times, you will want to see some areas of a dendrogram. The  and  buttons may be used to zoom in or out of the dendrogram.

Clustering Statistics Tab

The fourth page of the heatmap dialog box allows the close examination of matrices of similarities among codes or among groups as well as the statistics associated with the agglomeration processes of both the codes and the groups.



| | Globalization | Local Economy | Ethic | Control | Authority | Race/Ethnic relation | Freedom | Environment | Family |
|----------------------|---------------|---------------|-------|---------|-----------|----------------------|---------|-------------|--------|
| Globalization | 1.00 | 0.91 | 0.90 | 0.75 | 0.52 | 0.91 | 0.86 | 0.73 | |
| Local Economy | 0.91 | | 0.85 | 0.77 | 0.35 | 0.88 | 0.85 | 0.50 | |
| Ethic | 0.90 | 0.85 | | 0.95 | 0.22 | 0.85 | 0.86 | 0.46 | |
| Control | 0.75 | 0.77 | 0.95 | | 0.00 | 0.69 | 0.80 | 0.17 | |
| Authority | 0.52 | 0.35 | 0.22 | 0.00 | | 0.35 | 0.30 | 0.71 | |
| Race/Ethnic relation | 0.91 | 0.88 | 0.85 | 0.69 | 0.35 | | 0.75 | 0.75 | |
| Freedom | 0.86 | 0.85 | 0.86 | 0.80 | 0.30 | 0.75 | | 0.43 | |
| Environment | 0.73 | 0.50 | 0.46 | 0.17 | 0.71 | 0.75 | 0.43 | | |
| Family | 0.88 | 0.67 | 0.66 | 0.46 | 0.76 | 0.67 | 0.68 | 0.80 | |
| Protectionism | 0.60 | 0.82 | 0.76 | 0.84 | 0.00 | 0.61 | 0.70 | 0.00 | |
| Tradition | 0.78 | 0.85 | 0.86 | 0.88 | 0.30 | 0.64 | 0.73 | 0.21 | |
| Patriotism | 0.96 | 0.93 | 0.95 | 0.85 | 0.44 | 0.93 | 0.86 | 0.62 | |
| Novelty | 0.88 | 0.80 | 0.74 | 0.64 | 0.38 | 0.67 | 0.80 | 0.53 | |
| Representativeness | 0.93 | 0.82 | 0.90 | 0.75 | 0.52 | 0.91 | 0.70 | 0.73 | |

Correspondence Analysis

Correspondence analysis is a descriptive and exploratory technique designed to analyze relationships among entries in large frequency crosstabulation tables. Its objective is to represent the relationship among all entries in the table using a low-dimensional Euclidean space such that the locations of the row and column points are consistent with their associations in the table. The correspondence analysis procedure implemented in QDA Miner allows you to graphically examine the relationship between assigned codes and subgroups of an independent variable. The results are presented using a two or three-dimensional map. Correspondence analysis statistics are also provided to assess the quality of the solution. QDA Miner currently restricts the extraction to the first three axes. This ensures that the results remain easy to interpret. This limitation may, however, be removed in future versions upon request from users.

The first two tabs of the dialog box provide graphical views of correspondence maps. When the number codes or the number of subgroups is less than four, only the 2D Map page can be accessed. When the comparison is restricted to two groups of individuals, only one axis can be extracted. In this situation, the axis is plotted diagonally in the two-dimensional space. This has been done mainly for readability reason: plotting all code labels on a single horizontal axis would have produced a cluttered list of codes, rendering the graph useless.

Below is a description of the various controls in the dialog box, followed by some guidelines for interpreting correspondence plots.

2D Map Control

Plot When more than two axes have been extracted, this control allows the selection of all the possible axis combinations that can be graphed on the two axes of the plot.

2D and 3D Map Controls

Codes This checkbox displays or hides the row points (i.e., code names).

Groups This checkbox displays or hides the column points (i.e., subgroup labels)



Clicking this button enables to zoom in on a plot. To zoom in on an area of the plot, hold the left mouse button down and drag the mouse down and to the right. You'll see a rectangle around the selected area. Release the left mouse button to zoom in.



Clicking this button restores the original viewing area of the plot.



Items distributed in a very similar way among subgroups of the categorical variables may be plotted on top of each other, making them difficult to differentiate. Clicking down this button moves up or down overlapping items slightly allowing one to more clearly identify those words or categories that overlap. To disable this vertical adjustment, click the button again.



In 2D correspondence plots, there is no easy way to identify where items are located on the third dimension, while in 3D it remains difficult to position an item on the depth axis without applying a rotating motion to the chart or inserting anchor lines. When this button is pressed gradients of colors are applied on fonts in order to differentiate items on the front end of the depth axis from those in the back end and those in between. Up to four colors may be used to create those gradients. To adjust the color of those gradient, use the chart customization button (see below).



Moving this slider allows the adjustment of the scaling used to plot groups or classes of the categorical variable on the correspondence plot. While the positions of codes and groups relative to the origin of the axes are significant, it is important to remember that the scaling used for codes and groups are independent from each other. This slider may thus be used as a reminder of this fact. It may also be used to increase the readability of some plots, by moving group names so that they do not overlap code names.



Press this button to append a copy of the correspondence plot in the Report Manager. A descriptive title will be provided automatically. To edit this title or to enter a new one, hold down the SHIFT keyboard key while clicking this button.



This button is used to create a copy of the chart on the clipboard. When this button is clicked, a shortcut menu appears, allowing you to choose whether the chart should be copied as a bitmap or as a metafile.



Clicking this button opens a dialog box to customize the appearance of the correspondence plots.



Clicking this button prints a copy of the displayed chart.

3D Plot controls



This button can be used to show or hide left, bottom and back walls.



Clicking this button draws anchor lines from the floor to the data point to better locate data points in all 3 dimensions.



Clicking this button changes the viewing angle of the chart. To rotate the chart, make sure this button is selected, click any area of the chart, hold the mouse button down and drag the mouse to apply the desired rotation.



Locating a data point on the depth dimension of a 3D plot can be very difficult, especially when the plot remains static. Often this plot must be constantly rotated on the various axes to obtain an accurate idea of where the data point is located on this third axis. Clicking this button rotates the plot automatically. To disable the automatic rotation, click a second time.



This button is used to create an AVI movie file of the rotating chart. It behaves as both a record and a stop button. To start recording, simply click this button. Click again to stop the recording and to save the AVI movie file to disk. The  button must be activated for this function to function.

Please see the [Chart Animation](#) section for more information on recording a 3D animation and saving it in AVI, PowerPoint or GIF file formats.

Interpreting Correspondence Analysis Results

Interpretation of correspondence analysis maps can be somewhat tricky and should be done with great care, especially when examining the relationship between row points and column points. Here are some basic rules that should help you interpret these maps:

Relationship Among Codes (Row Points):

- The more similar the distribution of a code among subgroups is to the total distribution of all codes within subgroups, the closer it will be to the origin. Codes that are plotted far from this point of origin have singular distributions.
- If two codes have similar distributions (or profiles) among subgroups of the independent variable (columns), their points in the correspondence analysis plot will be close together. For example, if the codes consist of artist names and the studied subgroups represent different age groups, then, if the form of the distribution of two different artists among these age groups is similar, they will tend to appear near each other. Codes with different profiles will be plotted far from each other. Note: Two points may appear close to each other on a two- or three-axis solution, but may in fact be far apart when an additional dimension is taken into account.

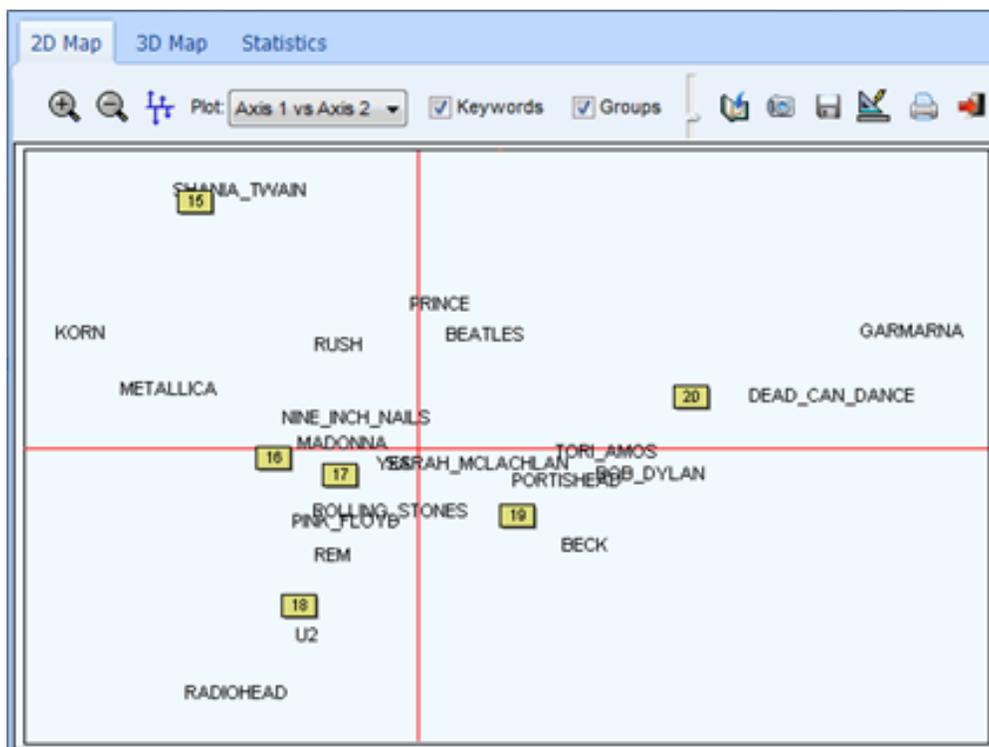
Relationship Among Subgroups (Column Points)

- The more singular a profile of coding for a subgroup is, compared with the distribution of the codes for the entire sample, the farther this subgroup will be from the point of origin.
- If two subgroups of individuals have similar profiles of coding, they will be plotted near each other. Subgroups with different profiles will be plotted far from each other. Again, it is important to remember that two points may appear close to each other on a two- or three-axis solution, but may in fact be far apart when an additional dimension is taken into account.

Relationship Between Codes and Subgroups (Row and Column Points):

- Great caution should be taken when interpreting the distances between two sets of points (row and column points). The fact that the name of a subgroup is near a specific code should not necessarily be interpreted as an indication that they are closely related.
- While the distance between codes and subgroups has no interpretable meaning, the angle between this code point and a subgroup point from the origin is meaningful:
 - An acute angle indicates that the two characteristics are correlated.
 - An obtuse angle, near 180 degrees, indicates that the two characteristics are negatively correlated.

In the example below, REM, U2 and Radiohead could be viewed as related to 18-year-old listeners. However, despite the fact that both REM and U2 points are closer to the 18-year-old subgroup, Radiohead should be identified as more characteristic of those listeners since it is farther from the origin.



- Codes closely associated with two subgroups will be plotted at an angle from the origin that will lie between those two groups. In the above example, the rock groups Korn and Metallica seem to be characteristics of both 15- and 16-year-old listeners.

For a more complete description of this method, its calculation and applications, see [Greenacre \(1984\)](#).

Bubble Charts

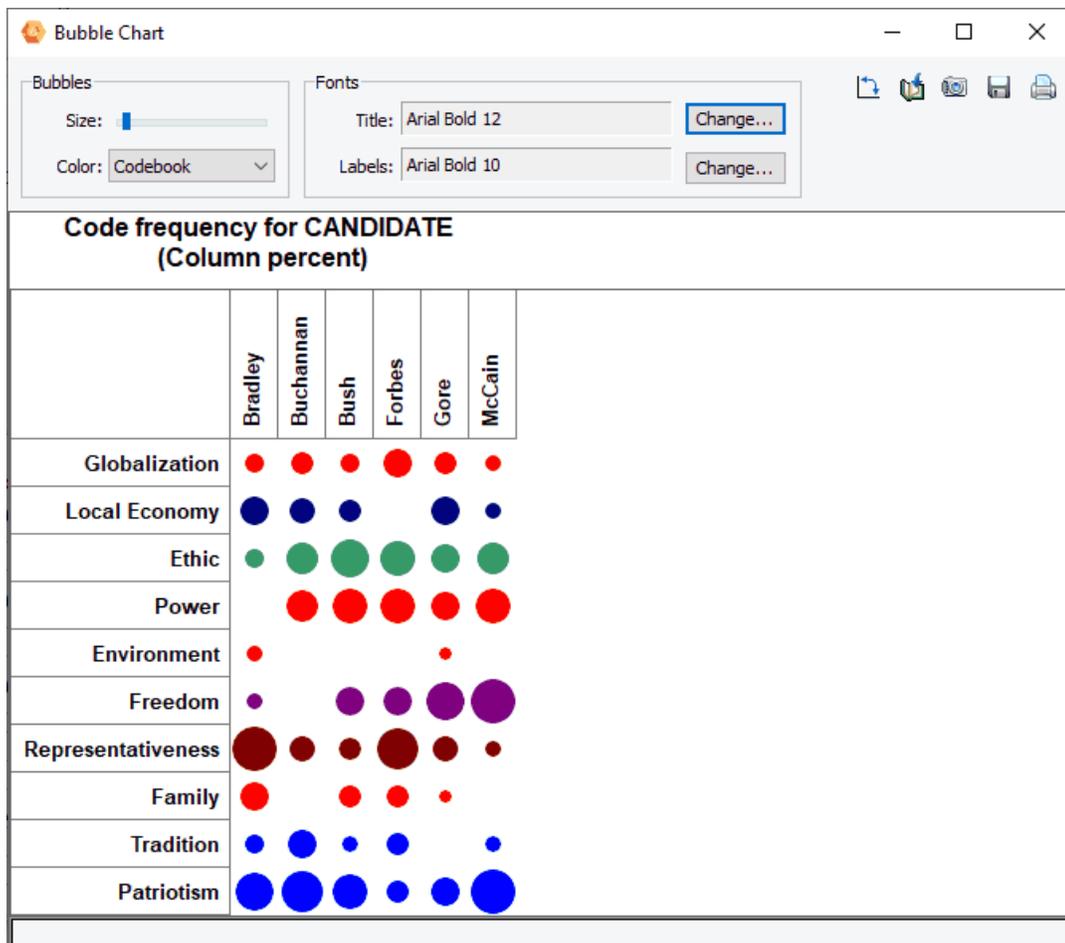
Bubble charts are graphic representations of contingency tables where relative frequencies are represented by circles of different diameters. This type of graphic chart allows one to quickly identify high- and low-frequency cells and is thus especially useful for presentation purposes. Many features of the chart can be customized to highlight specific findings. Rows and columns can be moved freely or

deleted, and one can adjust the color of each cell as well as the fonts used in the chart.

The bubble chart represents graphically the underlying table and displays the corresponding measure used (code occurrences or frequencies, word counts or percentages) and will also reflect the currently selected display settings (such as count, percentage of rows or columns, etc.).

To create a bubble chart:

- Select the **CODING BY VARIABLES** command from the **ANALYSIS** menu.
- Select the codes that you want to plot, along with the documents to which you wish to restrict the analysis.
- Set the **Tabulate With** option to the desired independent variable.
- Set the **Count** option to either **Code Occurrence**, **Code Frequency**, **Word Count**, or **% of Words**.
- Set the **Display** option to specify how this information will be displayed.
- Click the  button to construct the frequency matrix.
- Click the  button. A dialog box similar to this one will appear:



To increase or decrease the size of the bubbles:

- In the **Bubbles** group box at the top of the window, adjust the **Size** option using the cursor control.

To globally adjust the color of all bubbles:

- Set the **Color** option to either **Codebook** or **Single Color**. Choosing the **Codebook** option will reset the color of bubbles to the color associated with each code in the codebook.
- Selecting **Single Color** will bring a dialog box that will allow you to select which color should be used for displaying all bubbles in the chart.

To manually adjust the color of specific bubbles:

- Select the cell or group of cells you would like to alter.
- Right click and select the **SET COLOR** command. A dialog box will appear letting you choose a specific color value.

To move a row or a column:

- Click anywhere on the cell header containing the row or column label and hold the mouse down.
- Drag the mouse cursor over the desired new location and release the mouse button.

To delete selected rows or columns:

- Select a cell range covering the rows or columns you would like to delete.
- Right-click to display a popup menu.
- Select the **REMOVE** command and then choose **SELECTED ROWS** or **SELECTED COLUMNS** depending on your desired action.

To adjust the font size and style of the title and labels:

- Click the **Change** button beside the **Title** or **Labels** options. A Font setting dialog box will appear, letting you change the font, the font size, style, and color.

To edit the title

- Click anywhere in the title region and type in the new title. The height of the title region is automatically adjusted to the number of lines in the title.

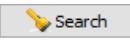
The following table provides a short description of additional buttons:

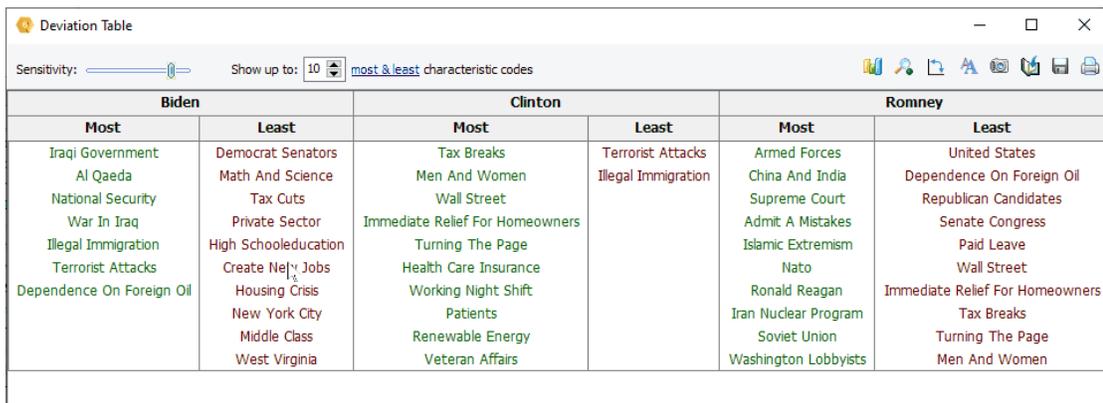
| Control | Description |
|---|--|
|  | Pressing this button transpose the grid so that rows become columns while columns are transformed into rows. Such a feature may be useful to flip rectangular charts and choose between a portrait or a landscape display. |
|  | Press this button to append a copy of the graphic in the Report Manager. A descriptive title will be provided automatically. To edit this title or to enter a new one, hold down the Shift keyboard key while clicking this button. |
|  | This button creates a copy of the chart to the clipboard. When this button is clicked, a shortcut menu appears allowing you to select whether the chart should be copied as a bitmap or as a metafile. |
|  | Click this button to save a chart on disk. Charts may be saved in BMP, JPG or PNG graphic file formats. |
|  | Clicking this button prints a copy of the displayed chart. |

Deviation Table

The deviation table allows you to see which codes are used more or less by a specific value of an independent variable (CODING BY VARIABLE) as compared to other classes of this variable. You can display codes that have a positive and/or negative association to each variable value in a unique manner, providing insights on which codes help discriminate each class from the rest.

To display the deviation table:

- ? Select CODING BY VARIABLES from the ANALYSIS menu.
- ? Specify the document(s), codes, and variables you wish to analyze.
- ? Once you've clicked the  button, a table will be displayed according to the specifications you've entered in the Table content section.
- ? Using the **Count** option, select the data you would like to use as input to the deviation table (Code occurrence, Code frequency, Word count, Percentage of words).
- ? Click the  button to display the deviation table. A dialog box similar to this one will appear:



| Biden | | Clinton | | Romney | |
|---------------------------|----------------------|---------------------------------|---------------------|----------------------|---------------------------------|
| Most | Least | Most | Least | Most | Least |
| Iraqi Government | Democrat Senators | Tax Breaks | Terrorist Attacks | Armed Forces | United States |
| Al Qaeda | Math And Science | Men And Women | Illegal Immigration | China And India | Dependence On Foreign Oil |
| National Security | Tax Cuts | Wall Street | | Supreme Court | Republican Candidates |
| War In Iraq | Private Sector | Immediate Relief For Homeowners | | Admit A Mistakes | Senate Congress |
| Illegal Immigration | High Schooleducation | Turning The Page | | Islamic Extremism | Paid Leave |
| Terrorist Attacks | Create New Jobs | Health Care Insurance | | Nato | Wall Street |
| Dependence On Foreign Oil | Housing Crisis | Working Night Shift | | Ronald Reagan | Immediate Relief For Homeowners |
| | New York City | Patients | | Iran Nuclear Program | Tax Breaks |
| | Middle Class | Renewable Energy | | Soviet Union | Turning The Page |
| | West Virginia | Veteran Affairs | | Washington Lobbyists | Men And Women |

Working with the deviation table:

The deviation table is constructed by looking at the relationship between the chosen code statistic (occurrence, frequency, percentage of words) and each value of the selected categorical variable. If a code appears more frequently for a specific value than for other values and if it reaches a certain threshold, it may appear under the **Most** column, the most characteristic ones appearing first. On the other hand, if a code appears less frequently than for other values and reaches a similar threshold, it may then be listed under the **Least** column. Fully or partially empty columns will happen when codes do not reach such a threshold. Three options will affect the display of codes in the deviation table.

- ? The **Sensitivity** trackbar allows you to set the threshold used to select codes to display. When adjusted to the left (less sensitive), only items highly specific to the value will be displayed. Moving the cursor of the trackbar to the right reduces the threshold and will require a lower association strength to include codes characteristic of a class.
- ? The **Show Up To** option allows you to set the maximum number of items to display in each column of the table. The minimum number of items one can chose is 5.
- ? A blue underline label immediately on the right of this numerical value may be clicked to select whether you want to display the **Most** used codes, the **Least** used ones, or both of them (**Most & Least**).

Selecting any code in the table will highlight it anywhere it appears in the table, allowing you to quickly

see which categories are positively or negatively associated with the selected code. You may also right click on a selected cell to chart its frequency or perform a search on it and retrieve all associated coded segments.

To chart information of selected code(s) by class:

- ? Select the codes in the deviation table you would like to chart.
- ? Click the  button on the tool bar or right-click and select the CHART command from the popup menu. A new window will appear with various chart options

See [Bar Charts and Pie Charts](#) for more information

- ? Your charts will display data corresponding to the **Display** option you selected before calling the deviation table.

To search for class-specific coded segments:

- ? Select the code within the class column for which you would like to retrieve segments.
- ? Click the  button on the toolbar or right-click and select CODE RETRIEVAL from the popup menu. A new window will appear displaying associated coded segments.

To flip the deviation table:

- ? Click the  button. Class columns will now be rows while codes will be displayed across columns

To adjust the font of the table's text:

- ? Click the  button. A new Font window will appear, allowing you to change the font type, style and size.
- ? Click **OK** to save the changes or **Cancel** to abandon them.

To copy the deviation table to the clipboard:

- ? Click the  button.
- ? You can choose between copying the table as Tab Delimited, HTML, or as Bitmap.

To append the table to the Report Manager:

- ? Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the Shift keyboard key while clicking this button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- ? Click the  button. A Save File dialog box will appear.
- ? In the Save As Type list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), SPSS data file (*.SAV) or Stata file (*.DTA). Tables may also be saved into a proprietary binary format (*.PMTX) and edited outside of QDA Miner using the Provalis Matrix editor.
- ? Type a valid file name with the proper file extension.
- ? Click the **Save** button.

To print the table:

- ? Click the  button.

Assessing Inter-Coder Agreement

When document coding is performed manually by human coders, individual differences in interpretation of codes between different coders often occur no matter how explicit, unambiguous and precise the coding rules are. Even a single coder is often unable to apply the same coding rules systematically across time. One way to ensure the reliability of the application of coding rules is to ask different raters to code the same content or to ask a single rater to code the same document at different times. The comparison of codes is then used to uncover differences in interpretation, clarify ambiguous rules, identify ambiguity in the text, and ultimately quantify the final level of agreement obtained by these raters. Unfortunately, the application of inter-coders agreement procedures often involves some requirements or assumptions that are not always compatible with the qualitative data analysis processes. At least two compatibility problems can be identified:

- 1. The Codebook Problem** - Computing inter-coders agreement requires that all coders share the same codebook. They should not be allowed to create their own codes or modify existing ones. An entirely inductive approach that would give each coder the possibility of developing his own codes during the analysis would result in a situation where the end result would very likely be incommensurable, each coder ending up with entirely different categories. In this situation, it would be impossible to establish the inter-raters agreement per se. Probably one of the only types of agreements that may be achieved in this case is by judging whether their final conclusions agree. While using a predefined unmodifiable codebook is the most obvious solution to this problem, a mixed solution may also be adopted. For example, the first coder may be given the opportunity to develop his own codebook or refine an existing one by adding categories or revising existing ones. Once the coding by the first coder is finished or once he is satisfied with the codebook state of development, this codebook can then be used by other coders to code existing documents. Another possibility would be to have a codebook that would contain a portion of unmodifiable codes but leave coders the possibility of modifying another portion of them or add new ones. In the latter case, only the fixed portion of the codebook could be submitted to an assessment of inter-coders agreement.
- 2. The Segmentation Problem** - Another problem is related to the common absence of predefined segments to be codes. The flexibility provided by many computer qualitative data analysis software to define the length and location of a segment to be coded creates a situation where the number of coded segments, their lengths and locations will very likely differ from one coder to the next. In this situation, a strict agreement definition that compares the assignment of the same codes with the same text segment would be too stringent to apply. The most common solution to this segmentation problem has been the prior segmentation of documents to be coded. However, an alternative solution is to somewhat relax the definition of the agreement.

QDA Miner allows to circumvent some of the constraints imposed by the inter-coders agreement

procedures by providing different levels of agreement and by relaxing the criterion used to establish the overlap of segments.

But first, in order to assess inter-coders reliability, some prior settings and conditions are required:

- The project should be configured to support login by more than one user (for more information on how to define multiple users, see [Security & Multi-Users Settings](#)).
- Each user with coding rights should then log in to the project using his own user name and password in order to apply codes to documents.
- To ensure the independence of the coding process, a specific user should not be allowed to view code assignments made by other users. The QDA Miner **Multi-Users Settings** dialog box provides an option to hide all codings made by other users.
- Each user has to code a common portion of the documents using the same codebook. The agreement can only be calculated on documents that have been coded by only one user. All other documents that have been coded by no more than one user will be ignored in the computation of the inter-coders agreement.

An alternative way to perform independent coding is to create multiple copies of an uncoded project, ask each coder to apply codes on their own copy of the project, and then combine all codings stored in different project files into a single master project using the project merging feature of QDA Miner (see [Merging projects](#)). Each coder, however, MUST log on with their own user name. Only when all the above conditions have been met will it become possible to assess the agreement between coders.

Computing Inter-Coder Agreement

In order to access the inter-coder agreement procedure, you must have the right to view codes created by other users. If a user does not have this right, only the administrator can remove this restriction by changing the [multi-users settings](#).

To access the inter-coder agreement procedure:

- Select the **CODING AGREEMENT** procedure from the **ANALYSIS** menu. A dialog box similar to the one below will appear:

| CODE | AGREE ABSENT | AGREE PRESENT | DISAGREE | PERCENT | SCOTT'S PI |
|----------------------|--------------|---------------|----------|--------------|--------------|
| Environment | 2 | 1 | 0 | 100.0% | 1.000 |
| Ethic | 1 | 2 | 0 | 100.0% | 1.000 |
| Family | 0 | 2 | 1 | 66.7% | -0.200 |
| Freedom | 1 | 1 | 1 | 66.7% | 0.333 |
| Globalization | 1 | 1 | 1 | 66.7% | 0.333 |
| Local Economy | 2 | 1 | 0 | 100.0% | 1.000 |
| Novelty | 1 | 1 | 1 | 66.7% | 0.333 |
| Patriotism | 0 | 3 | 0 | 100.0% | |
| Power | 1 | 1 | 1 | 66.7% | 0.333 |
| Race/Ethnic relation | 2 | 1 | 0 | 100.0% | 1.000 |
| Representativeness | 0 | 2 | 1 | 66.7% | -0.200 |
| Tradition | 1 | 2 | 0 | 100.0% | 1.000 |
| TOTAL | 12 | 18 | 6 | 83.3% | 0.657 |

The following four options need to be set prior to analysis:

Search in: This option allows you to specify on which document variables the analysis will be performed. If the current project contains more than one document variable, you will have a choice to select either one or more of them. By default, all document variables are selected. To restrict the analysis to a few of them, click the down arrow key at the right of the list box. A list of all available document variables will appear. Select the variables on which you want the analysis to be performed.

Codes: This option allows you to select which codes will be analyzed. By default, the analysis is performed on all codes in the codebook. You can select specific codes either from a drop-down checklist by clicking the arrow button or from a tree representation of the codebook by clicking the  button.

Coders: This option allows you to select the coders for which you want to assess the coding agreement. At least two coders must be selected. If more than two coders are selected, the agreement table will be calculated on all possible pairs of coders, provided that they have coded the same documents. By default, this option is set to include all coders. To restrict the analysis to a few of them, click the down arrow key at the right of the list box. A list of all coders will appear. Clear check marks beside the coders whom you want to exclude from the analysis.

Agreement criterion: QDA Miner provides a way to assess four different levels of agreement. The Agreement Criterion option is used to select the level of agreement that will be tested by offering a choice of four criteria:

Code Occurrence: This option checks whether coders agree on the presence of specific codes in a document, regardless of the number of times this code appears and regardless of code location. The agreement is calculated on a dichotomous value that indicates whether the code is present or absent.

 Some coders may agree that something is present in a document without necessarily agreeing on what specifically are the manifestations of this "something". For example, a researcher may ask two coders to check numerous job interviews and ask them to decide whether there are some indications of anxiety from the candidate. They may very well agree in the identification of such anxiety despite their inability to agree on its specific manifestations. If a research hypothesis or an interpretation is related to the mere presence or absence of

anxiety in various candidates, this level of agreement may well be sufficient. Coders do not necessarily have to agree on exactly where it occurs.

Code Frequency: This option checks whether coders agree on the number of times specific codes appear in a document. This criterion does not take into account the specific location of the codes in the document. The agreement is calculated by comparing the observed frequency per document for each coder.

☞ If someone wants to examine how often a specific speaker uses religious metaphors in his speeches compared with other speakers, he may ask different coders to assign a code "Religious Metaphor" every time they encounter one in a speech. Even if they disagree somewhat on what represents a religious metaphor, they may nevertheless agree on how many of those metaphors they find in each speech. Since the research question is related to the comparison of frequency of metaphors among speakers, then an agreement on the overall frequency per speech should be sufficient.

Code Importance: This option allows you to assess whether coders agree on the relative importance of a code in the document. This kind of agreement is achieved by comparing for a given code the percentage of words in the document that have been tagged as instances of this code. The proportion of agreement on this percentage is then used as a measure of agreement.

☞ If a researcher makes the hypothesis that when adolescents are asked to talk about a love relationship, male adolescents devote more time than females talking about the other person's physical characteristics and less time about their own needs or feelings. With this kind of hypothesis, the researcher needs to establish an agreement on the relative importance of these topics, not necessarily on the frequency or location. Again, coders may somewhat disagree on what specific segments represent instances where the adolescent is talking about their needs or feelings, but they may nevertheless come to a close agreement on the importance of each code.

Code Overlap: This last level of agreement is the most stringent criterion of agreement since it requires the coders to agree not only on the presence, frequency and spread of specific codes, but also on their location. When this option is selected, you need to provide a minimum overlap criterion expressed in percentage. By default, this criterion is set to 90%. If the codes assigned by both users overlap each other on 90% of their length, then these codes will be considered to be in agreement. If the percentage of overlap is lower than 90%, the program will consider them to disagree.

☞ Such a level of agreement would be interesting for several reasons. A researcher may be interested in identifying specific manifestations of a phenomenon. Another important reason is that the examination of agreements and disagreements at this level is accessory to the achievement of high agreement on any other lower level. In other words, close examination of where agreements occur or do not occur should allow one to diagnose the source of disagreement and take corrective actions to establish a shared understanding of what each code means for every coder. In a sense, checking the agreement at this level may be used in a formative way to train coders. Yet, the final summative evaluation of agreement may still be performed on a less stringent level, provided that this lower level matches the research hypothesis.

The first three criteria use documents as the unit of analysis and calculated for each document a single numerical value per code and coder. This numerical value represents either the occurrence,

the frequency of the specific code or the percentage of words in the document assigned to it. This measure is then used to establish the level of agreement. For example, when assessing agreement on code frequencies, if a user assigns a specific code to a document four times while another one uses this code only once for the same document, then the program will add 0.25 to the total number of agreements and 0.75 to the total number of disagreements. The absence of a code in the document is considered to be an agreement. Since the unit of analysis is the document and the numerical value for each code lies between 0 and 1, each document has an equal weight in the assessment of agreement, no matter how many codes are found in these documents.

When using code overlap as the criterion for assessing agreement, the unit of analysis becomes the assigned codes. For this reason, the total number of agreements and disagreements can be higher than for the other three assessment methods. In this case, the absence of a code in the document is not considered to be an agreement.

Statistic: The simplest measure of agreement for nominal level variables is the proportion of concordant codings out of the total number of codings made. Unfortunately, this measure often yields spuriously high values because it does not take into account chance agreements that occur from guessing. Several adjustment techniques have been proposed in the literature to correct for the chance factor. Three of these are currently available in QDA Miner:

Free marginal adjustment assumes that all categories on a given scale have equal probability of being observed. It assumes that coder decisions were not influenced by information about the distribution of the codes. This coefficient is equivalent to the [Bennett, Alpert and Goldstein's](#) (1954) S coefficient, [Jason and Vegelius's](#) (1979) C Coefficient, and [Brennan and Prediger's](#) (1981) k_n Index ([Zwick](#), 1988).

Scott's pi adjustment ([Scott, 1955](#)) yields results that are similar to those obtained using Cohen's Kappa ([Cohen, 1971](#)). Like the Kappa, it does not assume that all categories have equal probability of being observed and considers that coder decisions are influenced by this information. However, unlike the Cohen Kappa, pi treats differences among coders in this distribution as a source of disagreement.

Krippendorff's alpha ([Krippendorff, 2004](#)) is similar to Scott's pi but applies a correction for small sample sizes. The nominal alpha exceeds pi by $(1-\pi)/2n$ (where n is the number of units coded by the two coders) and asymptotically approximates pi as sample sizes become large

- To store the search expression and options, click the  button and specify the name under which those query options will be saved.
- To retrieve a previously saved query, click the  button and select from the displayed list the name of the query you would like to retrieve.
- Once the options has been set, click the  button to perform the analysis.

When codings by more than one user are available to assess the inter-coder agreement, two results tables will appear. The first table at the bottom of the Analysis tab (see above) displays for each code various frequencies as well the level of agreement obtained. The table also provides information about the overall agreement. The content of this table depends on the level of agreement that has been chosen. You will find the type of information such a table can contain below:

| | |
|----------------------|---|
| Code | Displays the name of the code. |
| Agree absent | Displays the number of times that users agreed on the absence of a code in a document. This column remains empty when assessing agreement using the code overlap criterion. |
| Agree present | Displays the number of times that users agreed on the presence of a code in a document. When assessing agreement on code frequency or code importance, |

this column displays the sum of all proportions of agreement calculated for each document.

Disagree Displays the number of times that users disagreed on the presence of a code in a document. When assessing agreement on code frequency or code importance, this column displays the sum of all proportions of disagreement calculated for each document.

Percent This column reports the percentage of agreement observed between coders. This index is calculated by dividing the total number of agreements by the total number of comparisons possible (agreement + disagreement). This measure does not take into account chance agreements that occur from guessing. For this reason, the percentage of agreement may often yields spuriously high values especially when assessing the less stringent levels of agreement.

The last column of the table displays the selected agreement statistic. This measure attempts to correct the observed level of agreement to take into account chance agreements.

List of Hits

The second table located on the **List of Hits** tab displays a list of all codings that were used for the assessment of inter-coder agreement.

| Case | Variable | Start | Category | Code | Coder | Agree with | Disagree with | Text |
|------------------------|----------|-------|---------------|--------------------|---------|------------|---------------|---|
| Bradley - Announcement | SPEECH | 613 | ValuesLiberal | Novelty | Normand | | Admin | I run to improve the opportunity for more Americans to live healthier, more economically secure, more personally fulfilling lives. |
| Bradley - Announcement | SPEECH | 1437 | ValuesLiberal | Representativeness | Admin | | Normand | I believe in a type of leadership that doesn't stand in the spotlight as much attention to millions of Americans who shine everyday. I believe in the kind of leadership that faces up to our problems. Let me give you a specific example. More than 2.5 million children in America live in what is called deep poverty. They live in homes that don't even reach the poverty level. As they grow up, many of them become armed, dependent on drugs, preoccupied with a distorted sense of "respect" and uninterested in the future. We won't reach our potential as a nation until we improve this unacceptable situation. |
| Bradley - Announcement | SPEECH | 1438 | ValuesLiberal | Freedom | Normand | | Admin | I believe in a type of leadership that doesn't stand in the spotlight as much attention to millions of Americans who shine everyday. I believe in the kind of leadership that faces up to our problems. Let me give you a specific example. More than 2.5 million children in America live in what is called deep poverty. They live in homes that don't even reach the poverty level. As they grow up, many of them become armed, dependent on drugs, preoccupied with a distorted sense of "respect" and uninterested in the future. We won't reach our potential as a nation until we improve this unacceptable situation. |

The table lists the case descriptor, the code name as well as the coders' values used for the calculation of agreement. When assessing code presence, code frequency or code overlap, this value will be either **Yes** (for present) or **No** (for absent). When assessing code importance, these columns will contain the total number of words assigned to this code.

Selecting an item in this table, either by clicking its row or by using keyboard cursor keys such as the **Up** or **Down** arrow keys automatically displays the corresponding case and document in the main window. This feature is especially useful for revising the codings made by different users and identify sources of disagreements.

The agreement table as well as the coding tables may be saved to disk in Excel, plain ASCII, text

delimited, MS Word, HTML, or XML format by clicking the corresponding  button.

They may also be appended in the Report Manager by clicking the  button. To edit the title used to describe the table, hold down the **Shift** keyboard key while clicking this button.

To print any table, click the  button.

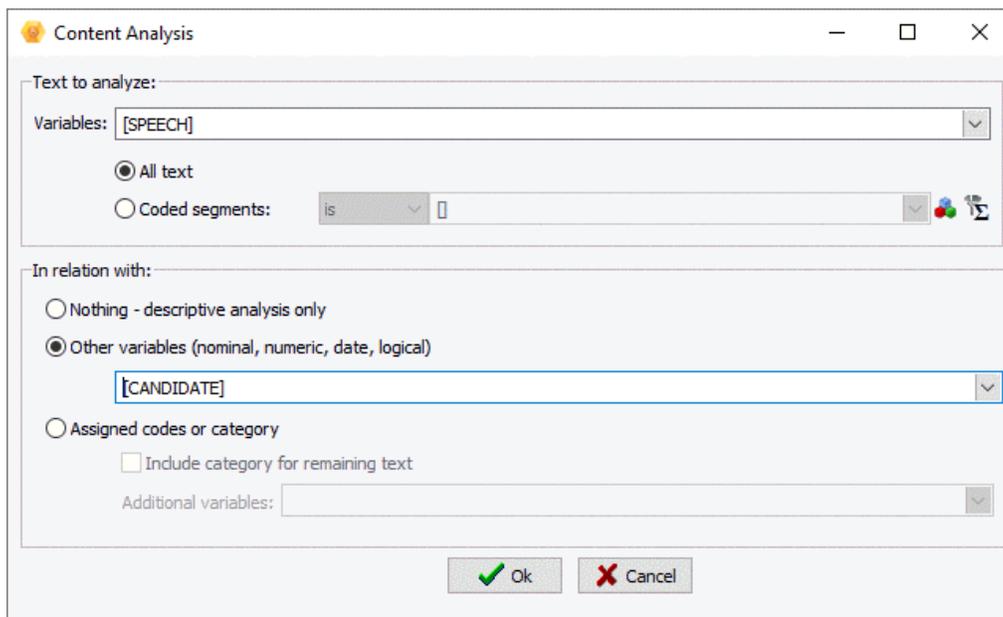
Content Analysis

WordStat is a quantitative content analysis add-on module that can be used to analyze words and phrases found in documents. When used with QDA Miner, WordStat can perform these analyses on entire documents or on selected code segments. It may also perform simple descriptive analysis or let you explore potential relationships between words, phrases or categories of words and other numeric or categorical variables.

There are many benefits to combining qualitative and quantitative content analysis techniques. For example, quantitative content analysis may be useful as an exploration tool prior to qualitative coding by allowing one to identify subtle differences in word usage between subgroups of individuals, or to quickly find the most common topics or phrases. Restricting the analysis to segments associated with specific codes may also be useful to identify potential words or phrases associated with those codes. You may then use the QDA Miner text retrieval tool to identify other segments to which this code may be assigned. Quantitative content analysis may also be useful after qualitative coding has been performed. For example, you may try to validate the conclusions drawn from manual coding by comparing those conclusions with the results obtained from a quantitative content analysis. Qualitative codings may also serve as the starting material to develop and validate a categorization dictionary that will allow automatic categorization of documents or cases.

To perform a quantitative content analysis on documents in a project:

- Select the **CONTENT ANALYSIS** command from the **ANALYZE** menu. The following dialog box will appear:



Variables: This option allows you to specify on which document variables the analysis will be performed. If the current project contains more than one document variable, you will have a choice of selecting either one or more of them. By default, all document variables are selected. To restrict the analysis to a few of them, click the down arrow key at the right of the list box. A list of all available document variables will appear. Select all variables that you want to analyze.

All text: By default, text analysis is performed on the entire document.

Coded segments: It is also possible to restrict the analysis to specific coded segments or exclude segments from the analysis by enabling this option. Set the list box immediately to the right of this option to **Is** if you want to analyze only the text found in the selected segments. Set it

to **Is not** to exclude these text segments from the analysis. Finally, select the code segments to analyze or to exclude either from a drop-down checklist by clicking the arrow button at the right end of the list box or from a tree representation of the codebook by clicking the  button. You may also select coded segments based on a minimum frequency criteria by clicking the  button.

The **In relation with** set of options allows you to specify whether the quantitative content analysis should consider potential differences or relationships with one or more quantitative or categorical variables.

Nothing: If this option is selected, WordStat will allow descriptive as well as co-occurrence analysis on words or categories of words.

Other variables: This option adds the possibility of examining in WordStat the relationship between these words or categories and the values of quantitative or categorical variables. The drop-down list box below this option is used to select the variables in relation to which the analysis will be performed.

Assigned codes or category: This option allows you to analyze the text assigned to codes and identify potential differences in words or categories of words associated with different codes. When this option is enabled, a temporary file is created containing all text segments associated with the selected codes along with a categorical variable to represent the code name. To add to this temporary file any remaining text segments not associated with any one of those codes, enable the **Include category for remaining text** option.

- Once the options have been set, click the **OK** button to call WordStat.
- WordStat can also be called from various dialog boxes to analyze retrieved text segments. This feature is available by clicking the  button located on the toolbar above the result table. In such a situation, the text analysis is performed on a temporary data file. For this reason, all coding features normally available in WordStat to apply codes to text segments are disabled.

Word Frequencies

QDA Miner can perform basic word frequency analysis allowing one to quickly get a glance of what are the most common terms in large amounts of text. A word frequency analysis may be useful to identify themes as well as associated terms that may later be used to retrieve segments related to those themes. When used in combination with text searches and text filters, such a feature may also be useful identify co-occurring words, allowing one to expand the search terms used for retrieving relevant text segments. The results are presented both visually, using a word cloud graphical display, and in a table format, for more precise frequency information.

In QDA Miner, the word cloud represents the 200 most frequent words, where the size of each word is proportional to their relative frequency of use in the text.



The **Frequencies** tab allows one to display the results of all the words in a table format. By default, words are displayed in descending order of frequency. A second column also displays this frequency using a rate per 10,000 words. Such a transformation facilitates comparisons across different text collections by eliminating the effect of different text sizes. To sort the table in alphabetical order, click on the first column header. To sort the table by frequency, click the second column header once for sorting the table in ascending order of frequency and click a second time to sort the list in descending order of frequency.

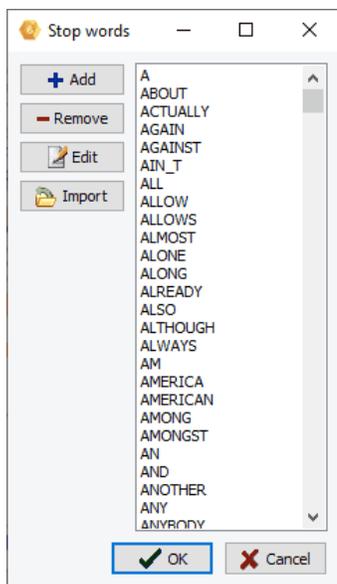
| Word | Frequency | Rate per 10K |
|------------|-----------|--------------|
| WORLD | 110 | 51.7 |
| NEW | 64 | 30.1 |
| PEOPLE | 63 | 29.6 |
| PRESIDENT | 57 | 26.8 |
| CHINA | 53 | 24.9 |
| FREEDOM | 51 | 23.9 |
| CENTURY | 50 | 23.5 |
| GREAT | 46 | 21.6 |
| WAR | 46 | 21.6 |
| NATION | 45 | 21.1 |
| PEACE | 42 | 19.7 |
| POWER | 42 | 19.7 |
| RUSSIA | 39 | 18.3 |
| INTERESTS | 38 | 17.8 |
| COUNTRY | 32 | 15.0 |
| SECURITY | 32 | 15.0 |
| TIME | 32 | 15.0 |
| GOVERNMENT | 31 | 14.6 |
| TODAY | 31 | 14.6 |
| FREE | 30 | 14.1 |
| HISTORY | 30 | 14.1 |

In QDA Miner, word frequency analysis may be performed from various locations. Running the WORD FREQUENCY analysis from the ANALYSIS menu will allow one to analyze all the text of the selected document variable while calling it from the DOCUMENT menu will restrict the analysis to the currently displayed document. Word frequency analysis may also be performed on the text segments obtained through several text search tools, such as the text retrieval, keyword retrieval, section retrieval, coding retrieval, etc.

Working With Stop Word Lists

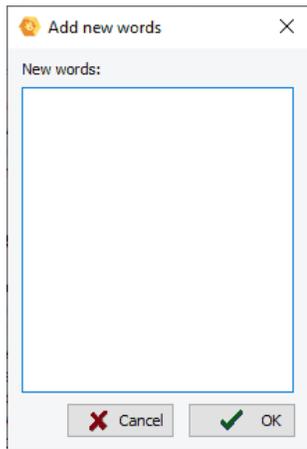
A stop word list consists of words that are commonly used in a specific language but do not necessarily provide useful information about the meaning or content of the text. Such a list typically contains prepositions, conjunctions, pronouns, determiners as well as adverbs, as well as some common verbs ("have", "has", "be", "is", "was", etc.). Removing those words allows one to focus on the meaningful content of text. When calling the word frequency analysis for the first time on a specific project, QDA Miner attempts to guess which language the text is written in and loads the correspond stop word list. If the amount of text being analyzed is too small, QDA Miner will not load any stop word list allowing you to select the proper stop word list. One may override the chosen stop word list, customize it, or merge an additional stop word list if the text being analyzed is written in more than one language. Please note that this list of stop words is specific to the project so that any customization made to this list will be restricted to this project only.

To edit the stop word list, click the  button on the toolbar. A dialog box like this one will appear:



To add words to the stop word list

- Click the **Add** button. A dialog box like this one will appear:



- Type the words or phrases you want to add, making sure that each new item is on a different line. All typed letters are automatically converted to uppercase, while spaces between words in phrases are replaced with underscore characters.
- Once finished, click the **OK** button to add those items to the stop-word list.

To remove words from the stop word list

- Select the items you want to remove. Pressing down the **CTRL** key allows you to select more than one item, while pressing down the **SHIFT** key may be used to select a range of items.
- Once finished selecting words, click the **Remove** button.

To edit words from the stop word list

- Select the items you want to edit. Pressing down the **CTRL** key allows you to select more than one item, while pressing down the **SHIFT** key may be used to select a range of items.
- Click the **Edit** button. A dialog box similar to the one used for adding item will be displayed and will contain an edit box with all the selected items.
- Once finished editing, click the **OK** button to replace the selected entries with those in the edit box.

To import a predefined stop word list

- Click the **Import** button. An open file dialog box will display stop word list files for all available languages.
- Select the stop word you want to import and click **Open**. The list of words will be automatically merged to the existing stop word list. If you want to replace a stop word list with another one, simply remove all items using the **Remove** button before importing the new stop word list.

Working With the Word Cloud

The word cloud graphical display in QDA Miner is interactive, allowing you to perform text searches from it, remove items either temporarily or more permanently by adding those to the stop word list. Its appearance may also be customized.

To remove a word temporarily and redraw a new word cloud without it

- Click on the word you want to remove, and then click the **X** button. You may also right-click on the word and select **Remove & Redraw** from the popup menu.
- Selecting the **Add to Stop Words** instead, or clicking the **🚫** button will move the selected word to the stop word list and perform a redraw. This word will no longer be shown in subsequent word

clouds or word frequency tables for this project unless the word is removed from the stop word list.

To perform a text retrieval on a specific word

- Click on the word you want to search and then click the  button.
- Select whether you want to retrieve **Sentences** or **Paragraphs**.

This will close the word cloud and perform a text search using the [Text Retrieval](#) feature of QDA Miner. One can then perform another word frequency analysis on the result of the text retrieval by clicking the  button, and iteratively search for a different word at each iteration. However, please note that the new search will not be restricted to the results of the first search, but will be performed on the entire set of responses. In other words, the search will not result in the combination of search words (using the AND operator) but will simply replace the search expression with the newly selected word.

Working With the Word Frequency table

The same operations to remove words, add them to the stop word list, or perform text retrieval may be achieved from the word frequency table (see section above for specific instructions). However, it adds the ability to perform those operations on more than one word at a time. When one performs a text retrieval on more than one word, the OR operator is used in the search expression resulting in the retrieval of text segments containing either one of the selected words.

Customizing the Appearance of the Word Cloud

The word cloud shape, its color palette, as well as the method used to position words may be adjusted. There are two methods to adjust the colors used to display words.

Click the  button will allow you to select a color palette to use from a predefined list. With this method, colors are assigned sequentially and results in colors uniformly distributed across the words irrespective of their frequency. One can also select a single color to be used for all words. Clicking the  button brings a dialog box with an additional possibility to assign a gradient of colors that will be applied based on each word frequency. To enable this option, on the **Text Color** page of this dialog box, select the **Gradient Scheme** radio button and select the colors to be used for high frequency (**From**) and for those with low frequency (**To**). An optional third color may be used to represent **Middle** frequency. The following table presents additional options available.

| | |
|--------------------------|--|
| Font | This option allows you to specify the font to be used to display words. |
| Shadow | Enabling this option displays a small drop shadow behind each word, creating a subtle 3D effect giving the impression that the words are raised above the background. |
| Form | This option allows you to choose to display words in inside a rectangular or an elliptical shape. |
| Starting position | When drawing a word cloud, QDA Miner starts positioning high frequency words and then attempts to place all the other words by decreasing order of frequency. When the starting position is set to from center it will position the most frequent one at the center of the cloud, and progressively position the following ones around it so that lowest frequency words will most likely be plotted on the edge of the cloud, far from the center. Setting this option to Random will position words in a more random fashion such that high frequency words may be more evenly distributed within the cloud. |

Statistical Analysis

QDA Miner shares the same file structure and format as Simstat, an easy-to-use, yet powerful statistical program. When both applications are installed on the same computer, you can call Simstat from within

QDA Miner and perform statistical analysis on any numerical or categorical variable in the project without having to export data to an external file, quit QDA Miner, or even close the active project.

Simstat offers a wide range of statistical analysis and graphics. It can also perform numeric and alphanumeric computation, transformation and recoding of variables, as well as advanced file management procedures such as data file merging, file aggregation, etc. (.

To run Simstat from QDA Miner, simply select the **STATISTICAL ANALYSIS** command from the **ANALYSIS** menu. While Simstat is running, QDA Miner will be disabled and it will not be possible to access any of its features. You will regain access to the program as soon as you quit Simstat.

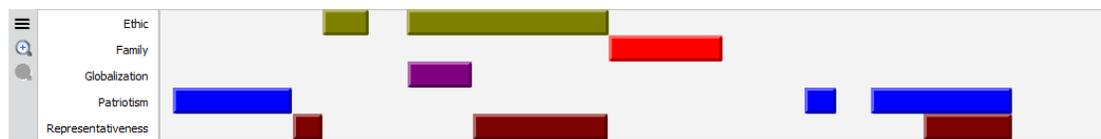
Please note that QDA Miner can produce frequency tables and crosstabulation on numerical and categorical variables and produce various charts (bar charts, pie charts, histograms, box-&-whiskers plots) without the need of run Simstat. For more information on this feature, see [Variable Statistics](#).

Document Overview

The **Document Overview** feature allows you to gain a better understanding of the coding in the current document at a glance. It gives you an idea of the volume of text associated with each code, the frequency each code occurs, the location within the document and sequence with which they occur, etc.

To open the document overview:

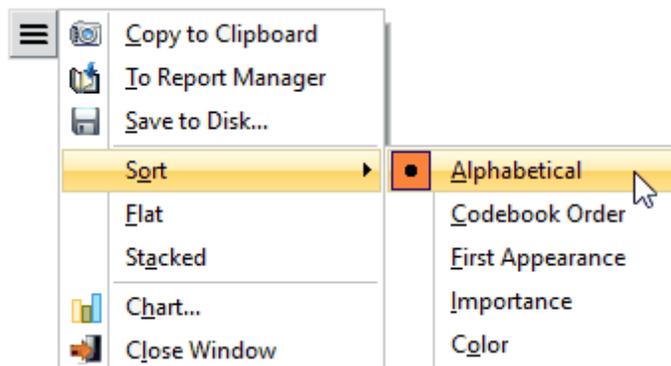
- Choose the document variable for which you wish to see the coding overview by selecting the corresponding tab at the top of the **DOCUMENTS** window.
- Select **CODING OVERVIEW** from the **DOCUMENT** menu bar at the top of the workspace. A display of the spatial distribution of the coding of your document will appear in a resizable window below your document.



Each bar represents the placement of the corresponding code in the document. The color of the bars matches the color assigned to each code. Selecting a bar in the graphic will highlight the related text in the document.

To access different viewing options:

- Click the  button at the top left of the Document Overview. A menu like the one below appears.



Sort: This option allows you to organize the overview in different ways. You can order the codes **Alphabetically**, in **Codebook Order**, by **First Appearance**, by **Importance** (volume of words associated with each code) or by **Color**. Sorting by color may come in handy when you have assigned different coding colors to different coders.

Flat: This option removes the depth and shading from the bars.

Stacked: This option will stack the bars along the left side of the overview rather than display the bars according to where each code appears in the text. It is useful to help show the relative volume of text associated with each code.

To chart your codings:

- Click the  button at the top left of the Document Overview. Select **CHART** from the menu and **Chart** dialog appears.

See the [Charting of Document Coding](#) for a detailed explanation of charting possibilities.

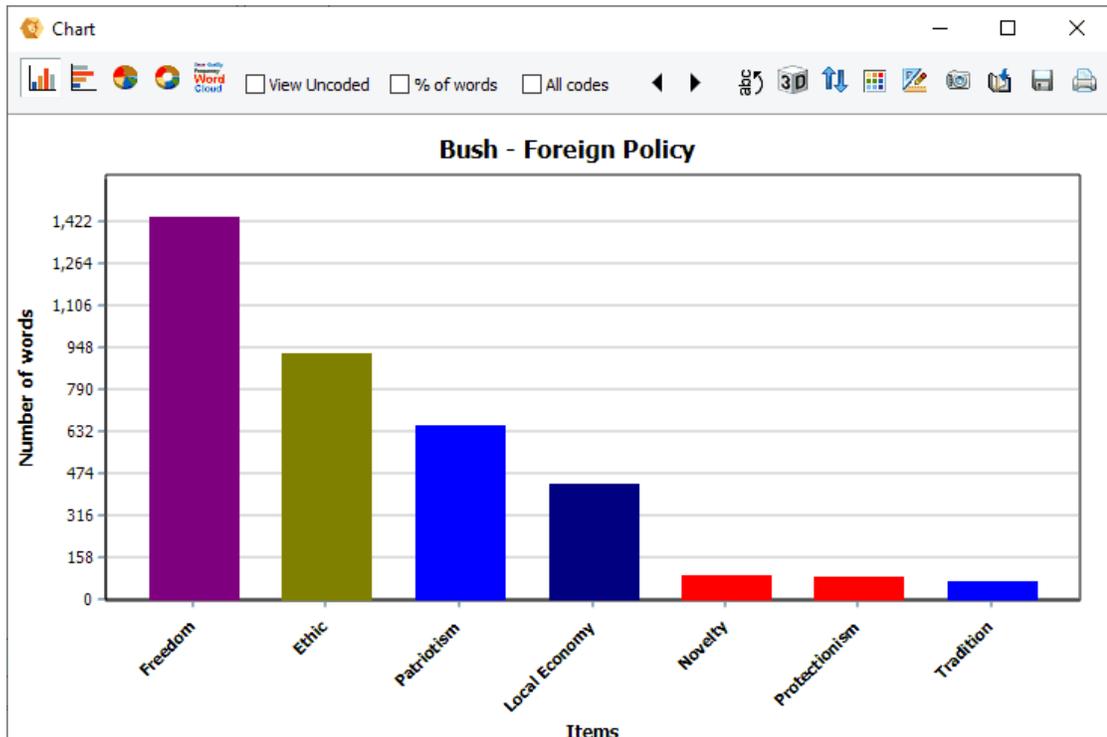
To save your overview:

- Selecting the corresponding item from the menu to copy the overview to the **Clipboard** to be pasted elsewhere, to save it in the **Report Manager** to be accessed later or to **Save to Disk**.

Charting of Document Coding

QDA Miner offers you a quick and easy way to visually display the distribution of codes within a single document by creating bar charts, pie charts and tag clouds.

- To access this feature select the tab of the document you wish to chart at the top of the **DOCUMENTS** window.
- Select **CHART** from the **DOCUMENT** menu. A dialog box similar to the one below will appear.



- Select the chart option you would like to display from the tool bar on the top of the dialog box. You can select from three types of charts and a tag cloud, which represent the number of words assigned to each code in the codebook.
- If you would like to chart according to the percentage of words tagged with a code check the **% of words** checkbox on the toolbar. Please note that pie charts are always shown in the percentage of words.
- Check the **View Uncoded** checkbox to show the number or percentage of words that remain uncoded.
- Select the **All codes** checkbox to display all of the codes contained in the codebook on the graph

even if there are no words associated with them in the document. Keep this box unchecked if you prefer the graph only to contain codes for which codings have been assigned.

Types of Charts



The vertical bar chart is the default chart used to display absolute or relative frequencies of codes.



The horizontal bar chart displays the same information as the vertical bar chart but is especially useful when the number of codes is high and their labels cannot be displayed entirely on the bottom axis.



The pie chart is useful to display the relative frequency of each code and compare individual values to other values and to the whole. Numerical values displayed in pie charts are always expressed in percentages.



The tag cloud shows the relative frequency of each code. This graphic is useful for quickly perceiving the most prominent code.

The Toolbar

The following table provides a short description of the available buttons and controls:



Press this button to vertically display the labels on the bottom axis.



Press this button to append a copy of the graphic in the Report Manager. A descriptive title will be provided automatically. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.



Click this button to retrieve a chart previously saved on disk.



Click this button to save a chart on disk. Charts may be saved in BMP, JPG or PNG graphic file formats.



Clicking this button prints a copy of the displayed chart.



Click this button to turn on/off the 3D perspective for the current chart.



This button allows the editing of various features of the chart such as the left and bottom axes, the chart and axes titles, the location of the legend, etc. (see [Bar Chart and Line Chart Options Dialog Box](#) below)



This button creates a copy of the chart to the clipboard. When this button is clicked, a shortcut menu appears allowing you to select whether the chart should be copied as a bitmap or as a metafile.



This button allows you to sort the chart by frequency or labels either ascending or descending.



This button allows you to increase the font size of the word cloud.



This button allows you to choose your color palette.

Customizing the chart

Clicking the  button displays a dialog box that allows one to customize the appearance of bar charts and pie charts. The options available in this dialog box represent only a small portion of all settings available.

Left or Bottom Axis

Minimum / Maximum: WordStat automatically adjusts the vertical axis scale to fit the range of values plotted against it. To manually set these values, type the desired minimum and maximum.

Increment: Increasing or decreasing this value affects the distance between numbers as well as tick marks. Horizontal grid lines are also affected by modification of this value.

Grid: This option turns horizontal grid lines on and off. Grid lines extend from each tick mark on an axis to the opposite side of the graph. To increase or decrease the number of grid lines or the distance between those lines, change the Increment value of the axis. A list box also allows a choice among five different line styles to draw the grid lines.

Titles

Proper titles and axis labels are of utmost importance when describing the information displayed in a chart. By default, WordStat uses variable names and labels as well as other predefined settings to provide such descriptions.

The title page allows one to modify the **top** title, as well as the labels on the **left**, **bottom** and **right** axis. To edit the title, select the proper radio button. Enter several lines of text for each title by pressing the **<Enter>** key at the end of a line before entering the next line.

The **Font** button on the right side of the edit box allows you to change the font size or style of the related title.

3D View

Orthogonal: Turning this option off disables the free elevation and rotation of the 3D chart.

Zoom: This option zooms the whole chart. Expressed as a percentage, increasing the value positively will bring the chart towards the viewer, increasing the overall chart size as the Zoom value increases.

3D Percent: The 3D Percent property indicates the size ratio between chart dimensions and chart depth by specifying a percent number from 1 to 100.

Perspective: Use this property with Orthogonal unchecked to modify the 3D perspective of the Chart. Larger values add more depth perspective.

Bar shadow: Enabling this option adds a shadow to the sides of 3D bars. Turning it off will color the sides of the bar the same as the front.

Bar width: This option determines the percent of total bar width used. Setting this value to 100 makes joined bars.

Bar depth: Use this property to limit the depth that each bar series use. By default, bars will take up the part proportional to the number of bar series in the chart so that the back of a bar will join the front of the bar immediately behind it. To insert a gap between series of bars, decrease this value.

Pie depth: Use this property to change the thickness of the pie chart.

Style

Style: This options allows you to choose the shape of the bar.

Gradient: This option allows you to choose the fading of the bar color.

Outline: Check this box if you would like an outline around your bar.

Color: This option allows you to determine the color of the outline.

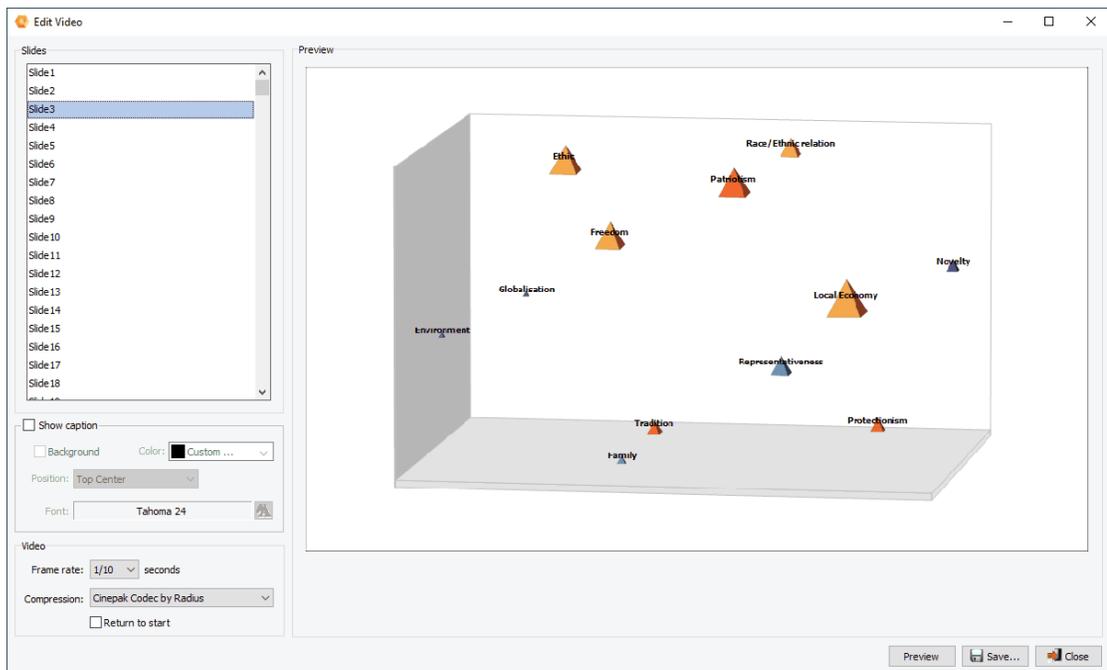
To further customize the chart, modify data points or value labels, click the  button located on the right side of the dialog box.

Chart Animation

QDA Miner allows you to store rotating three-dimensional graphics such as multidimensional scaling or correspondence plots in AVI movie files, as well as PowerPoint and animated GIF files for more portability and flexibility.

To record a chart animation:

- Before recording an animation, the 3D map must be set in motion. Click the  button to rotate the plot automatically.
- Click the  button to start recording.
- Click the  button a second time to stop recording. An **Edit Video** dialog box similar to the one below will appear.



Slides: This list box contains the individual slides that make up the animation. Right-click on a slide to **Edit**, **Add a prefix** or **Add a suffix** to its name. You can also delete a slide by choosing the **Delete** menu item.

Preview: This box displays the selected slide or the animation when the **Preview** button is clicked.

The **Show Caption** section of the dialog box allows you to display slide names as captions during the animation, and control its appearance. Select the checkbox to displays slide captions during the animation. The following options may be adjusted to control the appearance and position of the captions.

Background: This option allows you add a background color to the rectangular box surrounding the caption.

Color: This option allows you to choose the background color by clicking the arrow to the right of the field and clicking on the desired color.

Position: This option allows you to determine where the caption will be located.

Font: Clicking this button calls a **Font** dialog box which allows you to select the appropriate font, font style and size for the caption.

The **Video** section of the dialog box allows you to control the video output.

Frame rate: This option allows you to set the frequency at which the slides will be displayed.

Compression: This option allows you to choose the compression tool used to reduce the size of the video file.

Return to start: This option sets the video to play from start to finish and then in reverse.

- To preview the video, click the **Preview** button.
- If you are satisfied with the animation click the **Save** button. A **Save file** dialog box will appear. Choose a name for your video and select the file type (AVI, Animated GIF, PowerPoint Project or PowerPoint Show) from the **Save as type** drop-down menu.

Miscellaneous Features

Automatic Text Classification

Automated text classification is a supervised machine-learning task by which new documents are classified into one or several predefined category labels based on an inductive learning process performed on a set of previously classified documents. This machine-learning approach of classification has been known to achieve comparable if not superior accuracy to classification performed by human coders, yet at a very low manpower cost. It has been used to automatically classify documents into proper categories or to find relevant keywords describing the content and nature of a document. It has also been used to automatically file or re-route documents or messages to their appropriate destinations, to classify newspaper articles into proper sections or conference papers into relevant sessions, to filter emails or documents (like spam filtering), or to route a specific request in an organization to the appropriate department. Automated text categorization may also be used to identify the author of a document of unknown or disputed authorship.

Developing, optimizing and testing automatic document classification models often takes time and is performed by special applications such as the WordStat content analysis and text mining module. QDA Miner by itself, however, does not provide the necessary tools to develop classification models. To do so one needs the WordStat add-on module. Once developed, these classification models can be saved to disk and used for classification tasks. QDA Miner can read those saved models and apply them to text segments (sentences, paragraphs, coded segments) or whole documents. Results of classification may then be used to automatically assign codes to text segments or values to existing or new categorical variables.

In order to be accessible by QDA Miner, WordStat classification models should be stored on disk under the Provalis Research\Models subfolder.

The automatic classification option in QDA Miner is available from the result table of the following text-retrieval tools:

- Text Retrieval
- Query by Example
- Section Retrieval
- Keyword Retrieval
- Coding Retrieval
- Code Sequence Analysis

It is available from those analysis dialog boxes in a form of an optional panel appearing at the bottom of the result table.

- Click the  button to display or hide this panel. The dialog box looks like the one below:

| Text | Predicted class | Ratio | Economy | Educ |
|--|-----------------|---------|---------------|------|
| This is accomplished by concentrating on enduring national interests. And these are | Politic | 10000.0 | 0.0000 | 0.0 |
| Some have tried to pose a choice between American ideals and American interests-t | Politic | 10000.0 | 0.0000 | 0.0 |
| However, admitting China into the WTO will mean that annual trade status votes in | Politic | 10000.0 | 0.0000 | 0.0 |
| And I view FREE TRADE as an important ally in what Ronald Reagan called "a forwai | Politic | 3328.2 | 0.0003 | 0.0 |
| NAFTA and GATT have bequeathed us a trillion-dollar merchandise trade deficit. Ou | Politic | 148.1 | 0.0067 | 0.0 |
| We should all agree that Taiwan should also be admitted into the WTO until such tim | Politic | 77.9 | 0.0000 | 0.0 |
| I have long agreed that America must engage China if we are to maximize our influe | Politic | 72.2 | 0.0073 | 0.0 |
| I am convinced that China's entry into the WTO is, on balance, a good thing. And I ; | Economy | 20.8 | 0.9371 | 0.0 |
| Still our disappointments should not obscure our progress. They should discourage u | Politic | 3.9 | 0.1850 | 0.0 |

The **Classification Model** list box lists all WordStat classification models stored in the Models subfolder. The first step one needs to do in order to classify retrieved text segments or documents is to select a classification model. Once a model has been selected, the other panel options become available.

You may then click the  button to obtain information about the classification model developed by WordStat, such as the number of classes to be predicted, the algorithm used for prediction, etc.

To apply the selected model, click the  button. QDA Miner will take each entry in the result table above the classification panel and will apply the classification method to the associated text and will display the classification result in a table. The **Predicted Class** column indicates which class was identified as the most likely candidate for classifying this text. The **Ratio** command computes a ratio between the similarity score obtained for the predicted class and the second-best class. For example, if for a specific row, the ratio is equal to 8x, then we could say that the probability that this text belongs to the predicted class or that the similarity of this document to other documents from this predicted class is about 8 times higher than for documents in the second most likely class. If this value is low, such as 1.1x or 1.2x, we could say that the classified text is almost as likely to belong to the second class as the predicted class, and we may decide to ignore the classification results. All the other columns on the right of this Ratio column contain relative probability or similarity scores associated with each class. The score for the predicted class is shown in blue characters and a bold typeface.

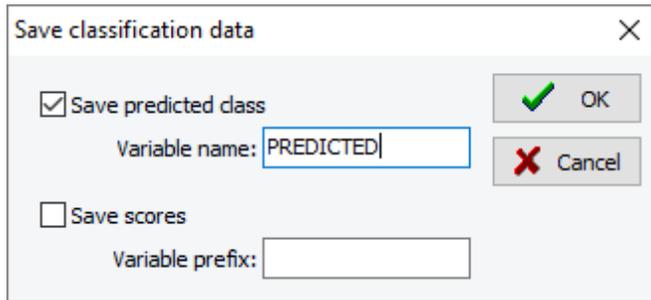
By default, the table is sorted in descending order of the ratio statistic, so that classifications for which we would be the most confident are listed at the top, while the classifications that are more uncertain are located at the bottom of the list. To sort this table in ascending order on any other column values, simply click the column header. Clicking a second time on the same column header sorts the rows again in descending order.

To remove a specific classification result, select its row and then click the  button.

Results of an automatic classification may be stored in the project in two different ways. If full documents are classified, one can store the value of the predicted class, and optionally, the probability or similarity score associated with each class into new numerical variables. If paragraphs or sentences are classified, then predicted classes may be attached to the text segments as codes. If codes corresponding to the name of the classes do not already exist, QDA Miner will automatically add those to the codebook, before applying them.

To store classification results as variables:

- Click the  button. A dialog box similar to this one will appear:



- To save the predicted class, click the check box beside the **Save predicted class** option and enter a variable name.
- To save the scores associated with each class and upon which the classification has been made, click the check box beside **Save scores** and enter a variable prefix (up to 7 characters). Variable names are created by adding successive numeric values to this prefix. For example, if the edit box at the right of the Variable Prefix option is set to "CLASS_", the variable names will be CLASS_1, CLASS_2, CLASS_3 etc.
- If any one of the specified variables does not exist, QDA Miner will create new ones and store the numerical values associated with either the predicted class or the class scores. A confirmation dialog box will ask you to confirm the creation of those new variables as well as the overwriting of any existing ones.

To store classification results as codings:

- Click the  button. QDA Miner will ask you to confirm the autocoding of all items in the table with a code corresponding to the predicted class. If you choose **Yes**, the program will browse through the entire project, select the corresponding text segment and assign the code corresponding to the predicted class. If any one of the codes is currently not in the codebook, a new category corresponding to the name of the classification model will be created, and the missing codes will be added to this new category.

To append a copy of the table in the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear.
- In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), and SPSS data file (*.SAV).
- Type a valid file name with the proper file extension.
- Click the **Save** button.

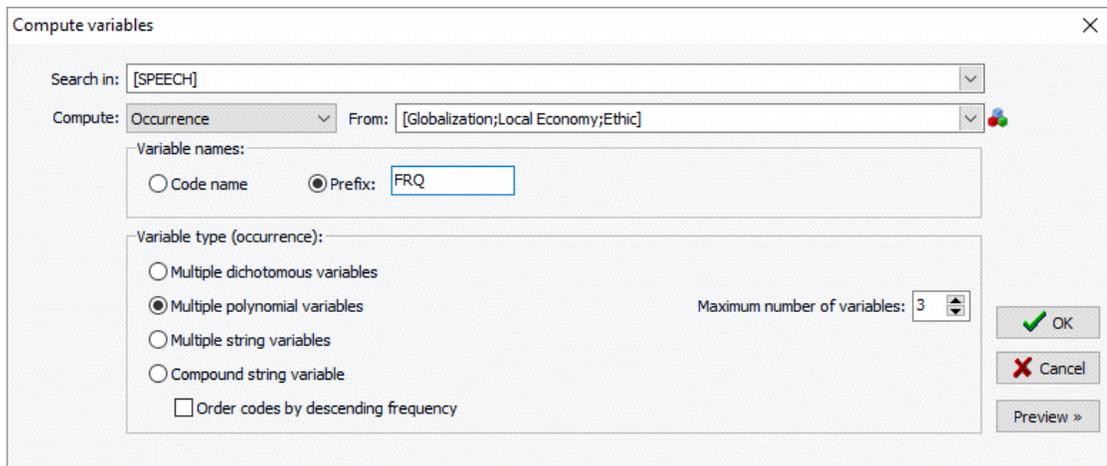
The obtained table can also be stored in a new project file, where each row becomes a new case and each column is transformed into a variable. This type of project file may be useful for performing a more detailed analysis of coded segments.

To print the table:

- Click the  button.

Storing Code Statistics into Numeric Variables

Most output tables created by QDA Miner may be exported to disk in various file formats including Excel, HTML, XML, MS Word, and delimited ASCII files. Code statistics may also be appended to the existing project file, allowing you to use those new variables for further numerical processing or case filtering. To append code statistics to your current project, select the **COMPUTE** command from the **VARIABLES** menu. The following dialog box will appear:



Compute: This option allows you to specify which statistic calculated on selected codes will be stored in the numeric variables. Four statistics are available:

- Occurrence
- Frequency
- Word Count
- Percentage of Words

From: Select the codes on which to calculate the above statistic by clicking the arrow button at the right end of the list box and by selecting these codes. The number of variables calculated will be equal to the number of codes selected.

Search in: This option allows you to specify on which document variables the calculation will be performed. If the current project contains more than one document variable, you will have a choice to select either one or more of them. By default, all document variables are selected. To restrict the computation to a few of them, click the down arrow key at the right of the list box. A list of all available document variables will appear. Select all the document variables that you want to analyze.

Variable names: This option sets what method should be used by QDA Miner to create new variable names. When set to **Code Name**, the program will attempt to use each code name as the name of a new variable. Illegal characters are automatically removed and long names are truncated to the first 10 characters. Duplicated variable names are distinguished by the substitution of numerical digits at the end of the name. When this option is set to **Prefix**, variable names are created by adding successive numeric values to a user-defined prefix. For example, if the edit box at the right of the prefix option is set to "FREQ", the variable names will be FREQ1, FREQ2, FREQ3, etc.

Variable type: By default, QDA Miner saves code statistics in as many variables as there are codes. For example, if your codebook contains 100 codes, then 100 variables will be necessary to store the statistics associated with each code, on code statistics per variable. When you choose to store the **occurrence** of codes, QDA Miner offers you the possibility to store the observed occurrences in a limited number of polynomial (or multinomial) variables. For example, if the maximum number of different codes per case is no more than 10, then you may instruct QDA Miner to create 10 nominal variables and store in each of those, a nominal value representing one of the codes. If fewer than 10 codes are found in a specific case, then the remaining variables are left empty. To store values in a limited set of nominal variables, choose the **Multiple Polynomial Variables** option and enter the **Maximum Number of Variables** that should be used for storing the code values. To store code names rather than nominal values, select **Multiple String Variables** instead. If the maximum number of codes found in a single case is higher than the specified number of variables, then a warning message will appear to let you know that some code occurrence information have been lost and to indicate what was the maximum number of codes encountered in the project. To store occurrences as zeros and ones in as many variables as there are codes, selecting the **Multiple Dichotomous Variables** option.

- When you click the **OK** button, the program prompts you to confirm the calculation of the required number of variables. If variables with similar names exist in the project, the confirmation dialog box will display the number of existing variables that would be overwritten as well as the number of variables that need to be created by this command. Click the **Yes** button to confirm the creation and overwriting of variables. Click **No** to abort the procedure.
- To exit from the dialog box without performing the recoding, click the **Cancel** button.

To export the code statistics directly to disk without the need to append new variables to the existing project, see [Exporting Code Statistics](#).

Exporting Code Statistics

Various code statistics may be exported to disk in different file formats including Excel, MS Word, HTML, XML and delimited ASCII files, allowing the data to be further analyzed using a statistical program.

To export code statistics to disk:

- Select the **EXPORT | CODE STATISTICS** command sequence from the **PROJECT** menu. The following dialog box will appear:

Export Code Statistics

Codes:
 Export: Occurrence of: [Globalization;Local Economy;Ethic]
 in: [SPEECH]

Variable type (occurrence):
 Multiple dichotomous variables
 Multiple polynomial variables (numeric values) Maximum number of codes: 3
 Multiple string variables
 Compound string variable
 Order codes by descending frequency

Other variables:
 Add variables: [CANDIDATE;TOPIC]
 Case descriptor
 Total number of codes per case
 Total number of words per case

OK
 Cancel
 Preview »

Export: This option allows you to specify which statistic calculated on selected codes will be stored into numeric variables and exported. Four statistics are available:

- Occurrence
- Frequency
- Word Count
- Percentage of Words

Of: Select the codes on which to calculate the above statistic by clicking the arrow button at the right end of the list box and by selecting these codes. The number of variables calculated will be equal to the number of codes selected.

In: This option allows you to specify on which document variables the calculation will be performed. If the current project contains more than one document variable, you will have a choice to select either one or more of them. By default, all document variables are selected. To restrict the computation to a few of them, click the down arrow key at the right of the list box. A list of all available document variables will appear. Select all the document variables that you want to analyze.

Variable type: By default, QDA Miner saves code statistics in as many variables as there are codes. For example, if your codebook contains 100 codes, then 100 variables will be necessary to store the statistics associated with each code, on code statistics per variable. When you choose to store the **occurrence** of codes, QDA Miner offers you the possibility to store the observed occurrences in a limited number of polynomial (or multinomial) variables. For example, if the maximum number of different codes per case is no more than 10, then you may instruct QDA Miner to create 10 numeric variables and store in each of those, a numeric value representing one of the codes. If fewer than 10 codes are found in a specific case, then the remaining variables are left empty. To store values in a limited set of nominal variables, choose the **Multiple Polynomial Variables** option and enter the **Maximum Number of Variables** that should be used for storing the code values. To store code names rather than numerical values, select **Multiple String Variables** instead. If the maximum number of codes found in a single case is higher than the specified number of variables, then a warning message will appear to let you know that some code occurrence information have been lost and to indicate what was the maximum number of codes encountered in the project. To export occurrences as zeros and ones in as many variables as there are codes, selecting the **Multiple Dichotomous Variables** option.

Add variables: This drop-down checklist box may optionally be used to add the values stored in one or more variables to the exported data file along with the code statistics.

Case descriptor: Enabling this option insert in the exported data file a string variable containing the case descriptor defined by the user. For information on how to create a case descriptor see [Setting the Cases Descriptor and Grouping](#).

Total number of codes per case: This options appends to each exported case, the total number of codes encountered in all selected documents.

Total number of words per case: This options appends to each exported case, the total number of words encountered in all selected documents.

- Once the options have been set up, click the **OK** button. A **File Save** dialog box will appear.
- Select the file format you want to create using the **Save As Type** drop-down list, enter a valid filename with the proper file extension and then click the **Save** button.

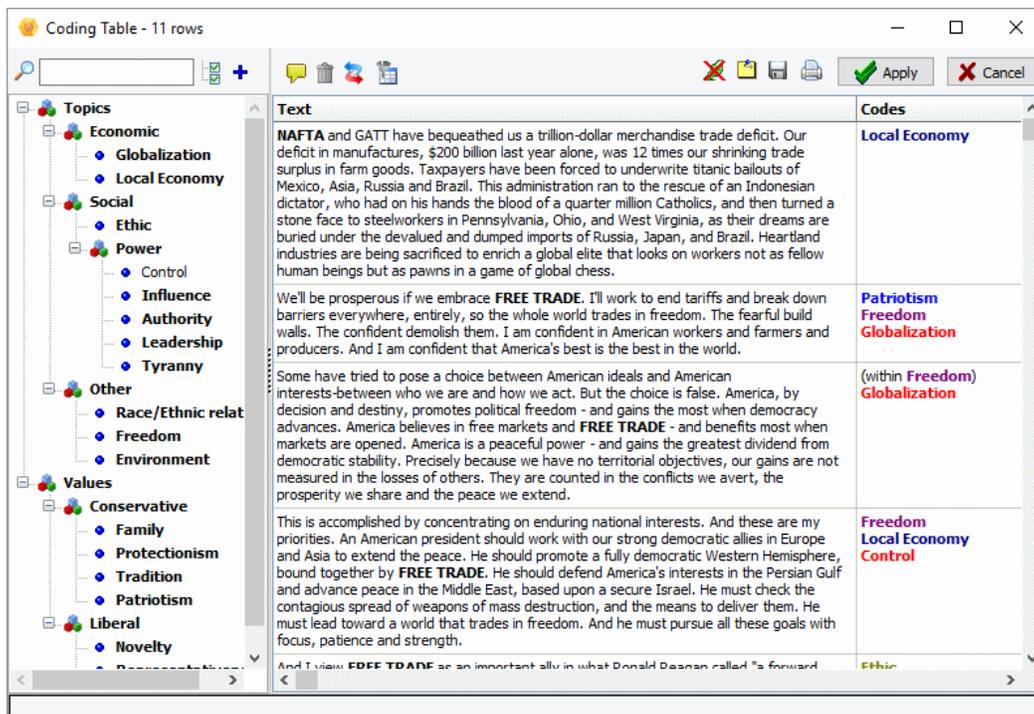
Exporting Co-Occurrence or Similarity Matrices

Matrices of co-occurrences or computed similarities may be exported to disk in Excel, MS Word, HTML, XML, and delimited ASCII files. To export such code co-occurrence as well as code or case similarity matrix:

- Select the **CODING CO-OCCURRENCES** command from the **ANALYZE** menu.
- Set the co-occurrence options on the first tab of the dialog box (see [Coding Co-occurrences](#) for information on those options)
- Move to the **Statistics** tab.
- Click the  button and select **CO-OCCURRENCE MATRIX** if you want to export the cross frequencies of codes, or **SIMILARITY MATRIX** to export the computed code or case similarity measures.
- Select the file format you want to create using the **Save as Type** drop-down list.
- Enter a valid filename with the proper file extension.
- Click the **Save** button.

Coding Text Segments Using the Coding Table

The Coding Table view provides an efficient way of assigning different codes to specific items in a list of extracted text segments. It is especially useful when coding large amounts of short text segments like responses to an open-ended question or a long list of customer feedback responses. This dialog box can be accessed from several text retrieval and coding retrieval tools in QDA Miner by clicking the  button.



The screenshot shows the 'Coding Table - 11 rows' dialog box. On the left is a tree view of 'Topics' including Economic (Globalization, Local Economy), Social (Ethic), Power (Control, Influence, Authority, Leadership, Tyranny), Other (Race/Ethnic relat, Freedom, Environment), and Values (Conservative: Family, Protectionism, Tradition, Patriotism; Liberal: Novelty). The main area is a table with two columns: 'Text' and 'Codes'. The table contains four rows of text segments with their corresponding codes. The first row is coded with 'Local Economy'. The second row is coded with 'Patriotism', 'Freedom', and 'Globalization'. The third row is coded with '(within Freedom)' and 'Globalization'. The fourth row is coded with 'Freedom', 'Local Economy', and 'Control'. The fifth row is partially visible and coded with 'Ethic'.

| Text | Codes |
|--|--|
| NAFTA and GATT have bequeathed us a trillion-dollar merchandise trade deficit. Our deficit in manufactures, \$200 billion last year alone, was 12 times our shrinking trade surplus in farm goods. Taxpayers have been forced to underwrite titanic bailouts of Mexico, Asia, Russia and Brazil. This administration ran to the rescue of an Indonesian dictator, who had on his hands the blood of a quarter million Catholics, and then turned a stone face to steelworkers in Pennsylvania, Ohio, and West Virginia, as their dreams are buried under the devalued and dumped imports of Russia, Japan, and Brazil. Heartland industries are being sacrificed to enrich a global elite that looks on workers not as fellow human beings but as pawns in a game of global chess. | Local Economy |
| We'll be prosperous if we embrace FREE TRADE . I'll work to end tariffs and break down barriers everywhere, entirely, so the whole world trades in freedom. The fearful build walls. The confident demolish them. I am confident in American workers and farmers and producers. And I am confident that America's best is the best in the world. | Patriotism Freedom Globalization |
| Some have tried to pose a choice between American ideals and American interests-between who we are and how we act. But the choice is false. America, by decision and destiny, promotes political freedom - and gains the most when democracy advances. America believes in free markets and FREE TRADE - and benefits most when markets are opened. America is a peaceful power - and gains the greatest dividend from democratic stability. Precisely because we have no territorial objectives, our gains are not measured in the losses of others. They are counted in the conflicts we avert, the prosperity we share and the peace we extend. | (within Freedom) Globalization |
| This is accomplished by concentrating on enduring national interests. And these are my priorities. An American president should work with our strong democratic allies in Europe and Asia to extend the peace. He should promote a fully democratic Western Hemisphere, bound together by FREE TRADE . He should defend America's interests in the Persian Gulf and advance peace in the Middle East, based upon a secure Israel. He must check the contagious spread of weapons of mass destruction, and the means to deliver them. He must lead toward a world that trades in freedom. And he must pursue all these goals with focus, patience and strength. | Freedom Local Economy Control |
| And I view FREE TRADE as an important ally in what Donald Reagan called "a forward | Ethic |

The codebook is on the left and a table with two columns to the right. The first column contains the text segments to be coded, one segment per row, and the second column contains the codes currently assigned to them. Codings that overlap – including, or enclosed in, text segments – cannot be modified or removed and are displayed between parentheses.

Clicking down the  button forces QDA Miner to synchronize the table with the main window so that moving from one row to another will cause the main window to display the corresponding case and document from which the selected text comes. The corresponding text in the original document will also be highlighted allowing one to easily view the full context of the selected text segment.

The assignment of codes to text segments can be performed in several ways, using either drag-and-drop operations or by clicking check marks beside codes in the codebook.

- Changes made using the coding table are not implemented immediately but are kept in memory.

To implement all changes made, click the  button. It is recommended to click this button regularly after making several changes.

- To close the dialog box and cancel all changes, click the  button.

To assign a code using drag-and-drop operations:

- Click on the code you would like to assign, keeping the mouse button down.
- Drag the code over the row you would like to assign the code to and release the mouse button.

OR

- Click the row you would like to code in order to select it and keep the mouse button down.
- Drag the row over the code you would like to assign and release the mouse.

While dragging, if a code cannot be assigned to a specific row, the mouse cursor will be displayed as a , indicating that the dragged item cannot be dropped at this location.

To assign or remove codes using check marks:

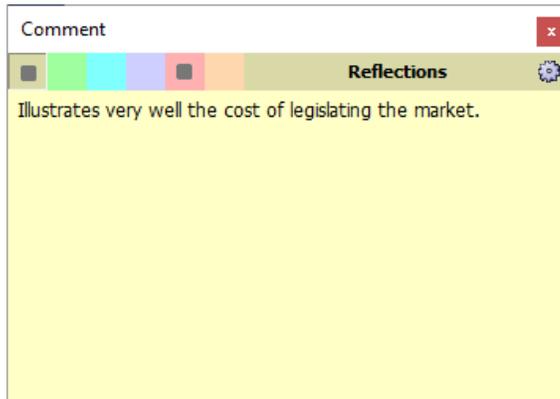
- Depress the  button to display check boxes.
- Select the text segment you would like to code.
- Click check marks beside codes you would like to assign to the selected row or clear any existing check marks beside codes you would like to remove.

To remove a code assigned to a segment:

- Click the  button located on the toolbar. A list of all codes assigned to the current row will be displayed.
- Select the code that you would like to remove.

To attach a comment to a coded segment or edit an existing one:

- Click the  button.
- Select the code to which you want to attach a comment. A small window like the one below will appear.



- Enter the text that you want to associate with the selected code or edit the existing text.
- Click the **X** button in the upper-right corner to save the comment and close the window.

When a note has been assigned to a coded segment, an exclamation point between square brackets is displayed on the left of the code name. To edit an existing comment, follow the above steps. To remove a comment, simply open the **Note Editor** and delete all text in the editing window.

To remove a row from the list:

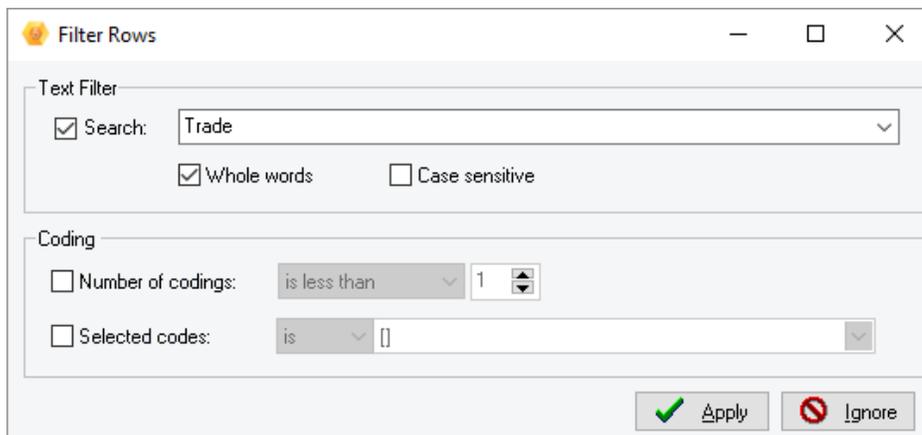
- Select its row and then click the  button.

To add a new code to the codebook:

- Click the  button.

To filter coded segments:

- Click the  button. A dialog box similar to this one will appear:



- To filter rows using a text-search expression, put a check mark beside the **Search** option and enter your search expression. The search filter supports the same syntax as the **Text Retrieval** tool and may contain Boolean, wildcards and parentheses.
- To filter row based on the number of codings assigned to text segments, put a check mark beside the **Number of Codings** option and set the associated operator and value.

- To filter rows containing specific codes, put a check mark beside the **Selected Codes** option and specify a list of codes to search for. When more than one code is specified, the table will show every row containing at least one of these codes.

To append a single row from the table to the Report Manager:

- Select the row containing the text segment you want to append to the Report Manager and click the  button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear. The **Frequency Matrix** or the **Search Hits** list may be saved to disk in Excel, plain ASCII, text delimited, MS Word, HTML or XML format.
- Type a valid file name with the proper file extension.
- Click the **Save** button.

To print the table:

- Click the  button.

Using the Retrieved Segments Dialog Box

The Retrieved Segments dialog box is displayed when you search coded segments from joint frequency or co-occurrence tables as well as from various charting tools (such as heatmaps, bubble charts, bar charts, dendrograms, proximity plots). It lists all coded segments associated with the last retrieval operation in a table that may be customized, saved or printed. The table provides basic information on each hit, including the case and the document variable in which it was found, the code name, the coder's name and coding date as well as the full text of the coded segment. When searching for co-occurrence, the texts of both coded segments are displayed in separate columns (see below).

| Case | Variable | CANDIDATE | Code | Text | Coder | Date |
|-----------------------|----------|-----------|-------|--|-------|------------|
| Bush - Foreign Policy | SPEECH | Bush | Ethic | Two months ago, at the Citadel in South Carolina, I talked about American defense. This must be the first focus of a president, because it is his first duty to the Constitution. Even in this time of pride and promise, America has determined enemies, who hate our values and resent our success - terrorists and crime syndicates and drug cartels and unbalanced dictators. The Empire has passed, but evil remains. | Admin | 2005-07-25 |
| Bush - Foreign Policy | SPEECH | Bush | Ethic | In the defense of our nation, a president must be a clear-eyed realist. There are limits to the smiles and scowls of diplomacy. Armies and missiles are not stopped by stiff notes of condemnation. They are held in check by strength and purpose and the promise of swift punishment. But there is more to say, because military power is not the final measure of might. Our realism must make a place for the human spirit. | Admin | 07/25/2005 |
| Bush - Foreign Policy | SPEECH | Bush | Ethic | In a world that depends on America to reconcile old rivals and balance ancient ambitions, this is the shortcut to chaos. It is an approach that abandons our allies, and our ideals. The vacuum left by America's retreat would invite challenges to our power. And the result, in the long run, would be a stagnant America and a savage world. American foreign policy cannot be founded on fear. Fear that American workers can't compete. Fear that America will corrupt the world - or be corrupted by it. This fear has no place in the party of Reagan, or in the party of Truman. In times of peril, our nation did not shrink from leadership. At this moment of opportunity, I have no intention of betraying American interests, American obligations and American honor. | Admin | 07/25/2005 |
| Bush - Foreign Policy | SPEECH | Bush | Ethic | American foreign policy must be more than the management of crisis. It must have a great and guiding goal: to turn this time of American influence into generations of democratic peace. | Admin | 2005-07-25 |
| Bush - Foreign Policy | SPEECH | Bush | Ethic | The Eurasian landmass, in our century, has seen the indignities of colonialism and the excesses of nationalism. Its people have been sacrificed to brutal wars and totalitarian ambitions. America has discovered, again and again, that our history is | Admin | 2005-07-25 |

To sort the list of hits:

- To sort in ascending order any column values, simply click this column header. Clicking a second time on the same column header sorts the rows in descending order. Columns may be reordered by dragging and dropping them in the desired location.

To add variables to the table:

- Use the **Add Variables** drop-down checklist box to add the values stored in one or more variable to the table of retrieved segments for the specific case from which a text segment originates.

To create a report of coded segments:

- Click the  button. The sort order of the current table is used to determine the display order in the report. This report is displayed in a text editor dialog box and may be modified, stored on disk in RTF, HTML or plain text format, printed, or cut and pasted into another application. Graphics and tables may also be inserted anywhere in this report.

To compute a word frequency analysis on the retrieved text segments:

- Click the  button.

For more information on this feature, see [Word Frequency Analysis](#).

To analyze the text of all retrieved segments using WordStat:

- Click the  button. QDA Miner will minimize itself and run WordStat, allowing you to perform a quantitative content analysis or apply text-mining techniques on the retrieved text segments. WordStat will also allow you to perform keyword comparisons across any other column in the table. To include additional data for comparison analysis, use the **Add Variables** option.

To append a copy of the table in the Report Manager:

- Click the  button. A descriptive title will be provided automatically for the table. To edit this title or to enter a new one, hold down the **Shift** keyboard key while clicking this button.

For more information on the Report Manager, see the [Report Manager Feature](#) topic.

To export the table to disk:

- Click the  button. A **Save File** dialog box will appear.
- In the **Save As Type** list box, select the file format under which to save the table. The following formats are supported: ASCII file (*.TXT), Tab delimited file (*.TAB), Comma delimited file (*.CSV), MS Word (*.DOC), HTML file (*.HTM; *.HTML), XML files (*.XML), Excel spreadsheet file (*.XLS; *.XLSX), and SPSS data file (*.SAV).
- Type a valid file name with the proper file extension.
- Click the **Save** button.

To print the table:

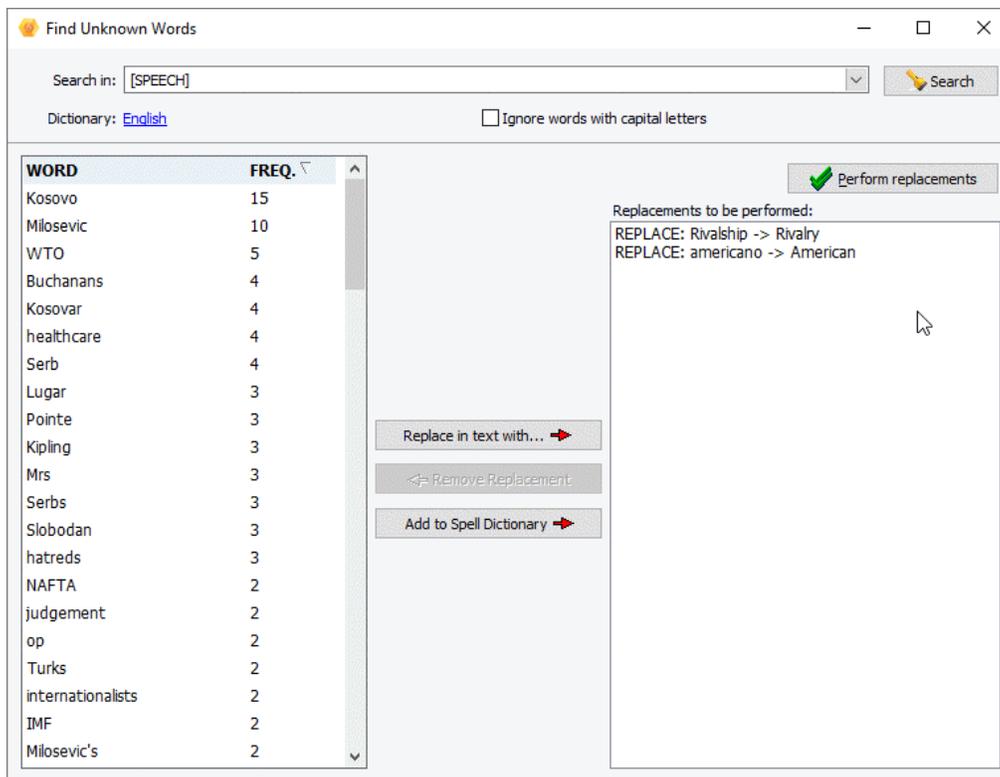
- Click the  button.

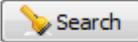
Identifying and Substituting Unknown Words

The Unknown Words feature of QDA Miner provides a way to quickly identify misspelled words by comparing the list of word forms encountered in the entire text collection or in the currently selected cases against a list of common words. By default, the extraction is performed in reference to common English words.

To identify unknown words in documents written in another language:

- Select **SPELL CHECKING | FIND UNKNOWN WORDS** from the **DOCUMENT** menu. A dialog box similar to below will appear.



Once the various options have been set, click the  button to start searching for vocabulary words. The list of words retrieved are then listed in a frequency table on the left of the screen and presented in descending order of frequency. To sort this list in alphabetical order, click the top of the first column.

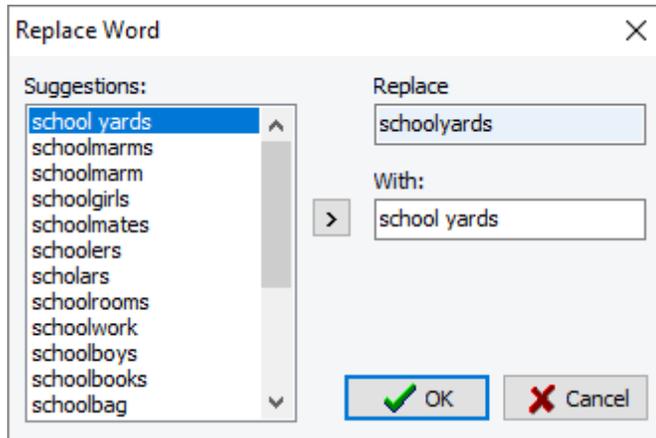
Two types of operations are allowed on these words: 1) You can replace all instances of a selected word in the original document by another word or phrase; or 2) you can add this word to a custom list of valid words causing the program to ignore those words the next time there is a search for vocabulary words.

Replacing words in the original documents or adding items to the list of valid words that should, from now on, be ignored are not performed immediately. Instead, they are added to an action list allowing you to review, modify or cancel previously defined actions prior to the application of all

the specified changes.

To replace words in the original documents:

- Select the word to be replaced.
- Click the  button. A dialog box similar to this one will appear:



- Enter the new replacement word or phrase or choose from the **Suggestions** list box on the left side of the dialog box.
- Click the **OK** button to confirm this replacement and add this operation to the list of actions to perform.

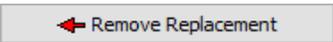
To add a word to the custom list of words to ignore:

- Select the word you would like to add to the custom dictionary.
- Click the  button.

To remove operations previously defined:

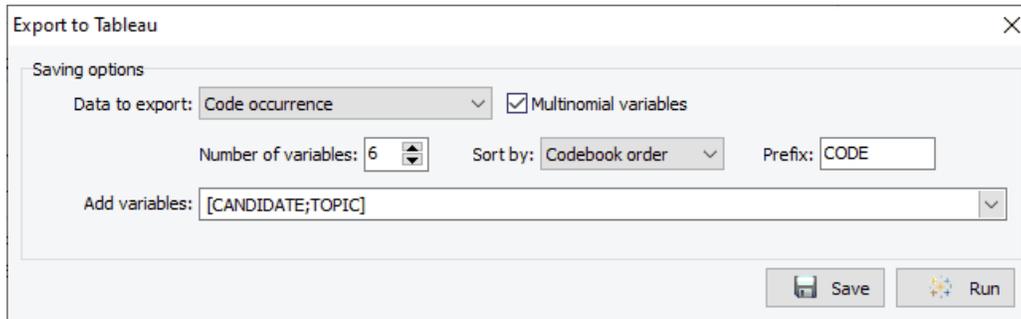
- Select the operations that you would like to remove.
- Click the  button. All words associated with the removed actions are moved back to the list of unknown words and positioned at the bottom of the list.

To perform all the defined word replacements:

- Click the  button.

Exporting to Tableau

Tableau Desktop is a flexible data visualization software used in business intelligence. QDA Miner can export quantified qualitative codings of a project along with any other variable and either create a Tableau connection file (*.tdsx) or run Tableau directly within the software. This feature can be accessed either through the [Coding Frequency](#) or [Coding by Variable](#) command by pressing the  button. A dialog box similar to this one appears, allowing one to choose how data should be transformed and how to run Tableau.



Data to Export: This option allows you to specify which statistic calculated on selected codes will be stored into numeric variables and exported to tableau. The exported codes and the document variables from which those statistics will be extracted correspond to the ones set in the calling dialog box. The quantification of qualitative coding can be performed using any one of the following statistics:

- Occurrence
- Frequency
- Word Count
- Percentage of Words

Multinomial variables: By default, QDA Miner saves code statistics in as many variables as there are selected codes. For example, if the selected codes consist of 100 codes, then 100 variables will be necessary to store the statistics associated with each code, on code statistics per variable. When you choose to store the **occurrence** of codes, QDA Miner offers you the possibility to store the observed occurrences in a limited number of multinomial variables. For example, if the maximum number of different codes per case is no more than 5, then you may instruct QDA Miner to create 5 string variables and store in each of those, a string value representing one of the codes. If fewer than 5 codes are found in a specific case, then the remaining variables are left empty. If the maximum number of codes found in a single case is higher than the specified number of variables, then a warning message will appear to let you know that code occurrence information has been lost and to indicate what was the maximum number of codes encountered in the project.

Add variables: This drop-down checklist box may optionally be used to add the values stored in one or more variables to the exported data file along with the code statistics.

Once the options have been set up, click the **Run** button to call Tableau immediately.

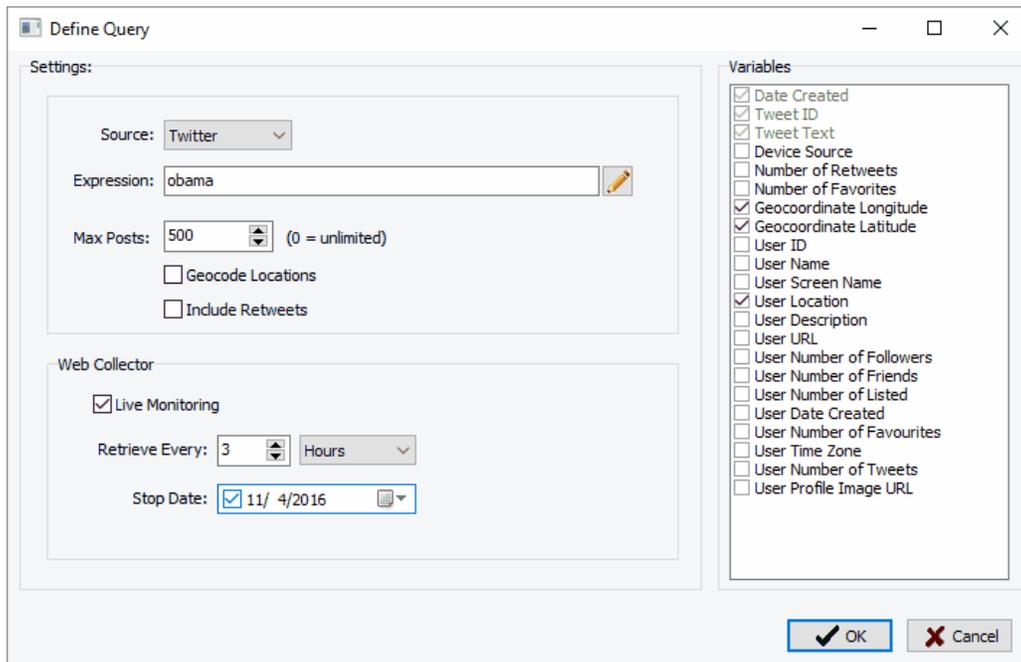
To save the data into a Tableau connection file that may later be used, click the Save button instead. A **File Save** dialog box will appear. Enter a valid filename with the proper file extension and then click the **Save** button.

Web Collector

The Web Collector is an external tool that can be accessed through QDA Miner, through the system tray or the Windows start menu. It monitors RSS feeds, Twitter posts and Facebook comments. If you have chosen to live monitor your social media search, the Web Collector will collect newly published posts or comments, which can then be appended to your project.

Setting the Web Collector

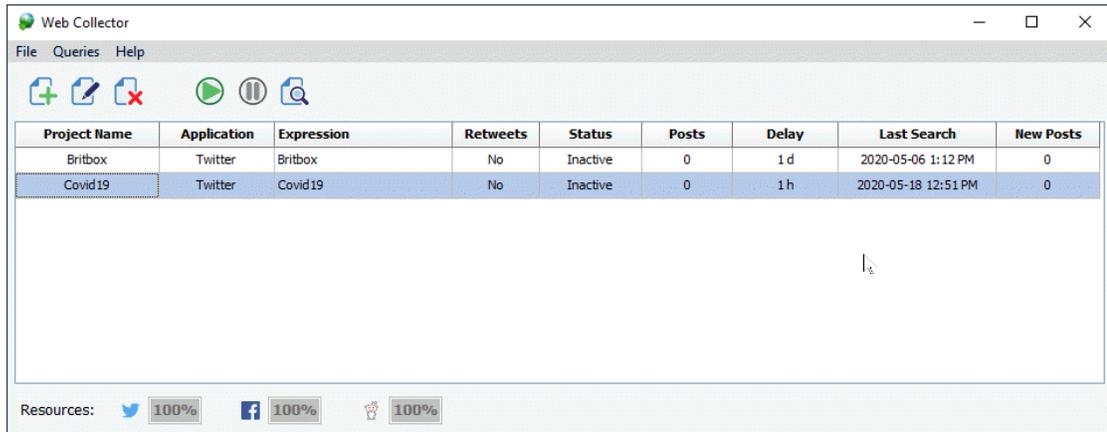
When you create an RSS, Twitter or Facebook project you have the option of monitoring the project over time. That means that data will be collected by the Web Collector according to a user defined time interval until a stop date is reached or until the monitoring is disabled or deleted. Data will continue to be collected as long as the Web Collector is running. As the Web Collector is a completely separate application, QDA Miner does not have to be running for it to work. Please see the corresponding section on how to import from [RSS](#), [Twitter](#) or [Facebook](#) for more information on creating live monitoring queries.



If you have checked **Live Monitoring** query the Web Collector will run in the background. If you restart Windows, the Web Collector will start automatically and continue collecting data as long as the query remains active.

Accessing the Web Collector

- You can access the Web Collector by clicking on the  icon in the system tray. Alternatively, click on the Web Collector menu item in your Windows start menu and the Web Collector will appear.



The Web Collector displays a list of all of the RSS, Twitter and Facebook projects that you are currently monitoring. It displays the following information:

Project name: The project associated with your query.

Application: The social media platform that is being monitored.

Expression: Either the URL of the RSS feed or Facebook page or your Twitter search query.

Retweets: For Twitter searches, this column will read **Yes** or **No** depending on if you have chosen to include Retweets when setting up your project.

Status: Lets you know if the data is being collected. Will either read **Active**, **Inactive** or **Searching**.

Posts: The number of posts collected. This will be reset to zero if the Tweets, Facebook or RSS posts are appended to a project.

Delay: The time interval you set for your capture.

Last search: The date and time of the last data capture.

New posts: The number of new posts captured since you last viewed the data.

Twitter resources: The percentage of Twitter resources you have available is displayed in the bottom left of the screen.

Facebook Resources: The percentage of Facebook resources you have available is displayed in the bottom left of the screen.

Web Collector Functions

You can **Edit**, **Add**, **Delete**, **Pause** and **Resume** queries in the Web Collector by selecting the corresponding icon from the tool bar or by selecting the corresponding command from the **QUERIES** menu. You can also **view the data** associated with each query in the same manner.

To add a query:

- Select the query you want to modify.
- Click the  button.

- A **Define/ Edit Query** dialog box will appear.
- Add your query.
- Click **OK**.

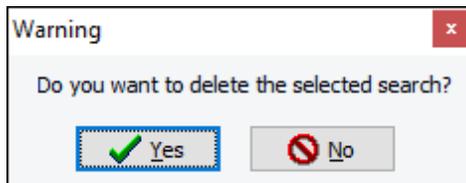
Please see the corresponding section on how to import from [RSS](#), [Twitter](#) or [Facebook](#) for more information on creating live monitoring queries.

To edit a query:

- Select the query you want to modify.
- Click the  button
- A **Define/ Edit Query** dialog box will appear.
- Add your query.
- Click **OK**.

To remove a query:

- Select the query you want to modify.
- Click the  button. A warning dialog will appear.



- Click **Yes** if you want to continue with the deletion. If you do not want to delete the query click **No**.

To pause a query:

- Select the query you want to modify.
- Click the  button
- The query status will change from **Active** to **Inactive** and the Web Collector will cease collecting data.
- To pause all queries at the same time select **PAUSE ALL QUERIES** from the **QUERIES** menu.

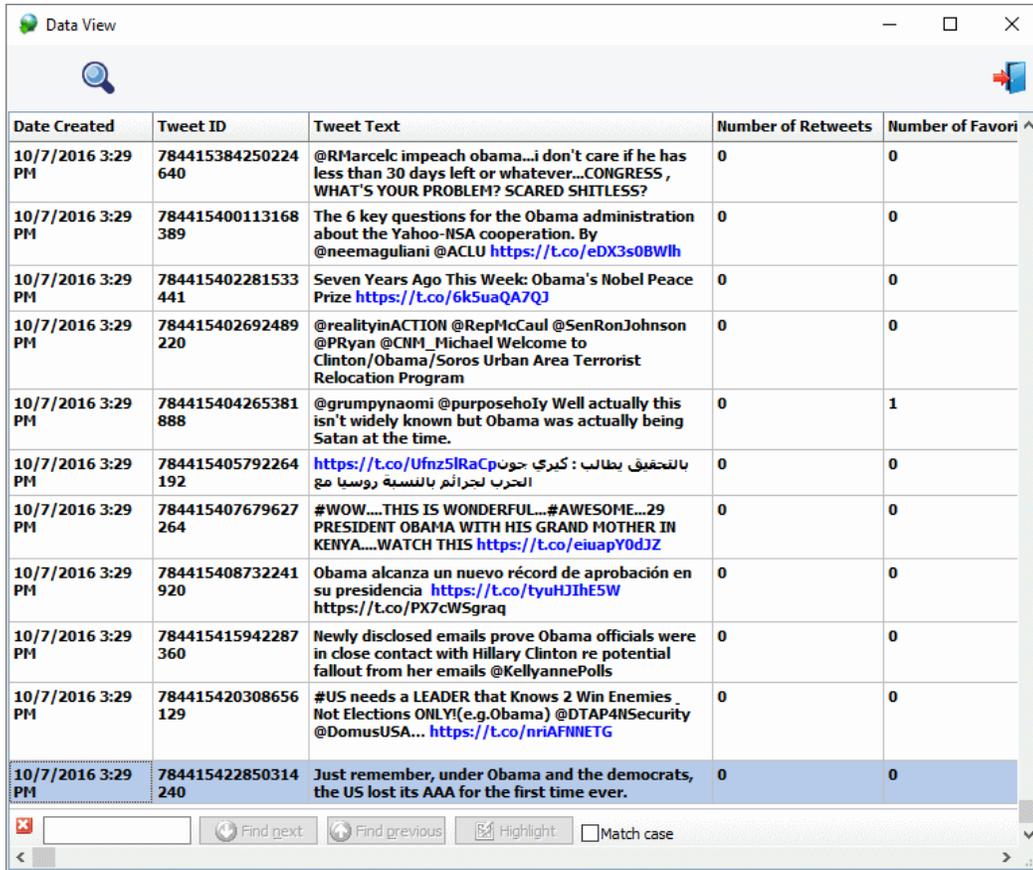
To resume a query:

- Select the query you want to modify.
- Click the  button.
- The query status will change from **Inactive** to **Active** and the Web Collector will resume collecting data.

- To resume all queries at the same time select **RESUME ALL QUERIES** from the **QUERIES** menu.

To view data:

- Select the query for which you would like to view the data.
- Click the  button and a **Data View** dialog will open.



| Date Created | Tweet ID | Tweet Text | Number of Retweets | Number of Favorites |
|-------------------|--------------------|---|--------------------|---------------------|
| 10/7/2016 3:29 PM | 784415384250224640 | @RMarcel: impeach obama...i don't care if he has less than 30 days left or whatever...CONGRESS , WHAT'S YOUR PROBLEM? SCARED SHITLESS? | 0 | 0 |
| 10/7/2016 3:29 PM | 784415400113168389 | The 6 key questions for the Obama administration about the Yahoo-NSA cooperation. By @neemaguliani @ACLU https://t.co/eDX3s0BWLh | 0 | 0 |
| 10/7/2016 3:29 PM | 784415402281533441 | Seven Years Ago This Week: Obama's Nobel Peace Prize https://t.co/6k5uaQA7QJ | 0 | 0 |
| 10/7/2016 3:29 PM | 784415402692489220 | @realityinACTION @RepMcCaul @SenRonJohnson @PRyan @CNM_Michael Welcome to Clinton/Obama/Soros Urban Area Terrorist Relocation Program | 0 | 0 |
| 10/7/2016 3:29 PM | 784415404265381888 | @grumpynaomi @purposehoIy Well actually this isn't widely known but Obama was actually being Satan at the time. | 0 | 1 |
| 10/7/2016 3:29 PM | 784415405792264192 | https://t.co/Ufnz5lRaCp بالتحقيق يطالب : كيري جونزون الحرب لجزائري بالنسبة روسيا مع | 0 | 0 |
| 10/7/2016 3:29 PM | 784415407679627264 | #WOW....THIS IS WONDERFUL...#AWESOME...29 PRESIDENT OBAMA WITH HIS GRAND MOTHER IN KENYA...WATCH THIS https://t.co/eiuapY0dJZ | 0 | 0 |
| 10/7/2016 3:29 PM | 784415408732241920 | Obama alcanza un nuevo récord de aprobación en su presidencia https://t.co/tyuHJihE5W https://t.co/PX7cW5sgraq | 0 | 0 |
| 10/7/2016 3:29 PM | 784415415942287360 | Newly disclosed emails prove Obama officials were in close contact with Hillary Clinton re potential fallout from her emails @KellyannePolls | 0 | 0 |
| 10/7/2016 3:29 PM | 784415420308656129 | #US needs a LEADER that Knows 2 Win Enemies Not Elections ONLY!(e.g.Obama) @DTAP4NSecurity @DomusUSA... https://t.co/nriAFNINETG | 0 | 0 |
| 10/7/2016 3:29 PM | 784415422850314240 | Just remember, under Obama and the democrats, the US lost its AAA for the first time ever. | 0 | 0 |

The table contains the variables that you selected to include when you initially created your project. Posts captured since you last viewed the project will be in bold. Posts that have already been viewed will **not** be in bold.

- Select the  button to enable the search function at the bottom of the screen.
- Type your search term into the field and select **Find next** or **Find previous** button.
- Check the **Match case** checkbox if you want the text case to be exactly as you have written it in the search box.

To close the Web Collector:

- Click the **X** at the top right of the dialog box.

Report Manager

The Report Manager is a separate application that has been designed to store, edit and organize documents, notes, quotes, tables of results, graphics and images created by QDA Miner or imported from other applications. Items can be added to the Report Manager directly from QDA Miner without needing to run the Report Manager.

The  button, found in many locations in QDA Miner, may be used to copy entire documents, tables and charts to the Report Manager. Selected text segments or image areas may also be appended by clicking the  button.

To access the Report Manager from QDA Miner, run the **REPORT MANAGER** command from the **PROJECT** menu.

The program presents its information as an outline, allowing a hierarchical organization of miscellaneous pieces of information that is ideal for project management, organizing ideas, structuring information, or designing and writing a research report.

The workspace emulates the appearance of Windows Explorer or of a standard Help file with the Table of Contents (TOC) on the left and the Editor on the right.

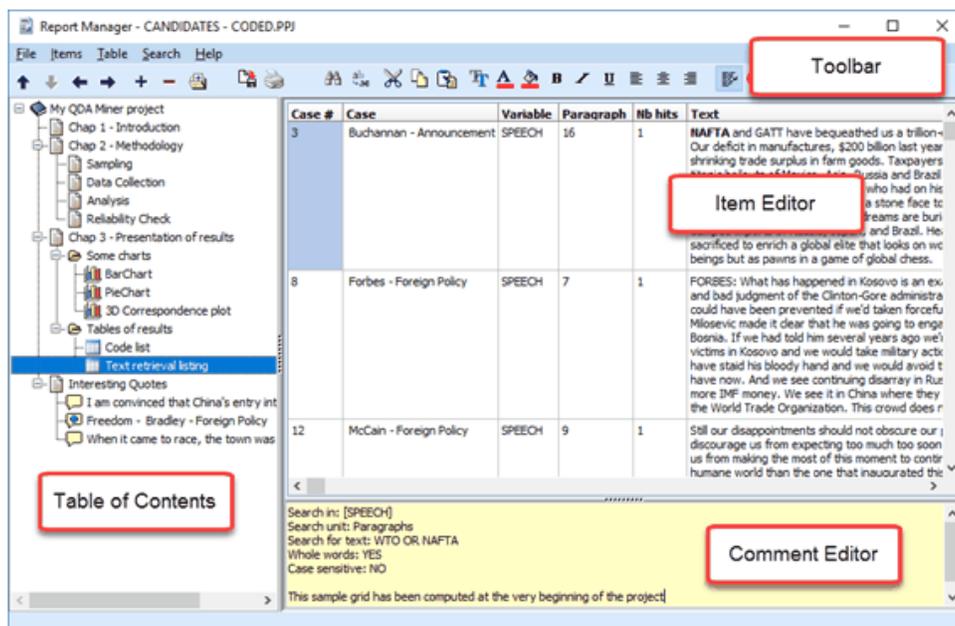


Table of Contents panel

Report Manager files are made up of items or topics that are like chapters in a book. Each item can be thought of as a separate word processor, a table or a graphic file editor or viewer, all of which are stored together in the QDA Miner project file. This panel provides powerful functions for organizing items and structuring the information in a hierarchical manner.

Item Editor

The largest panel on the right of the program window is the Item Editor, which is like a built-in word processor. This is where the item selected in the Table of Contents can be edited. Clicking a Table of Contents item displays its contents for editing.

Toolbar

The Toolbar provides quick access to the most frequently-used functions. Just position the mouse over a tool button and wait for the display of a brief text describing its function.

Comment panel

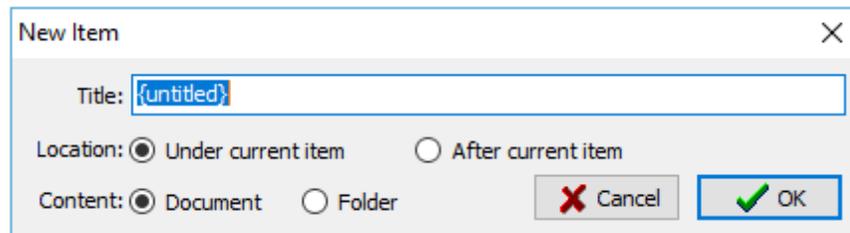
The Comment panel below the Item Editor allows the insertion and editing of comments related to the selected topic. When new items are added to the Report Manager from QDA Miner, a default comment is often already present, providing useful information about the origin of this item.

Working with the Table of Contents

Creating a New Item

To create a new item:

- Select the Table of Contents entry that will be the "parent" or "sibling" of the new item.
- Select the **NEW** command from the **ITEMS** menu or click the **+** button. A dialog box like this one will appear:



- Enter the title for the new item.
- If the new item should be a "child" of the selected item, click **Under Current Item**; if the item should be positioned after the current item, then set it to **After Current Item**.
- Select whether the new item will be a **Document** or a **Folder**. Folders are empty items that are used as containers for other items.
- Click **OK**. The new item will become the current one.

Importing Items from Files

To import items from files:

- Select the item under which the imported items will be stored.
- Select the **IMPORT FILES** command from the **ITEMS** menu or click the  toolbar button. An Open File dialog box will appear.
- Select the type of data you would like to import by selecting the appropriate Files of Type list box option. The Report Manager can import the following data types:
 - DOCUMENTS - Plain text (.TXT), MS Word (.DOC), WordPerfect (.WPD), Rich Text (.RTF) or HTML files (.HTM or .HTML)

- GRAPHICS - Windows Bitmap (.BMP), Windows Metafile (.WMF), JPEG files (.JPG or .JPEG) and Portable Network Graphic files (.PNG)
 - CHARTS - QDA Miner or WordStat Charts (.WSX)
 - DELIMITED DATA - Tab delimited (.TAB) or Comma Separated Value (.CSV) data files.
- Select one or several files to be imported and click the **Open** button.

Renaming an Item

To rename an item:

- Select the item to be renamed.
- Select the **RENAME** command from the **ITEMS** menu or click the  toolbar button.
- In the Item Title Dialog, change the title.
- Click **OK**.

Deleting an Item

To delete an item:

- Select the item to delete in the Table on Contents.
- Select the **DELETE** command from the **FILE** menu or click the  toolbar button.
- You will be asked to confirm that you really want to delete the item. If you're sure, then click **Yes**.

NOTE: Be aware that you cannot undo this if you make a mistake.

Moving an Item

As more items are created and the Report Manager hierarchy grows, it is inevitable that you will want to move items around, either to place one item under another, or to promote one to a higher level.

To move items using drag-and-drop:

The easiest way to move items in the Table of Contents is by using drag-and-drop operations. Using the mouse, you can move an item to a different location or move a group of items stored under a "parent" item by dragging this "parent" item to its new location.

- Select the item to move by clicking and holding down the left mouse button. (Keep the mouse pressed until the drag-and-drop operation is completed.)
- Drag the item to its new location and, only then, release the mouse button.
- The dragged item will now become a "child" of the destination item.
- To move the item to the same level as the item under the cursor, simply hold the ALT key while dropping the dragged item.

To move items using the toolbar:

You can also use menu commands and toolbar buttons to move items. To promote an item is to move it to a higher level in the hierarchy, making the item a "sibling" to its former "parent". To demote an item is to move it to a lower level and make it a "child" of its previous "sibling". After selecting the item you want to move, use one of the following four commands:

- To promote the selected item, click the  button, or select the **PROMOTE** command from the **ITEMS** menu.
- To demote the selected item, click the  button, or select the **DEMOTE** command from the **ITEMS** menu.
- To move the selected item up relative to its siblings, click the  button or select the **MOVE UP** command from the **ITEMS** menu.
- To move an item down relative to its siblings, click the  button or select the **MOVE DOWN** command from the **ITEMS** menu.

Adding or Editing Item Comments

The Comment panel below the Item Editor allows one to insert a new comment or edit an existing one related to a selected topic.

To type a new comment or to edit one, simply click in the yellow region of this panel and start to type. The comment is automatically saved as soon as you move to another item or leave the Comment panel. While there is no menu item or toolbar icon associated with this feature, standard clipboard operations are supported for copy and pasting text. A popup menu with standard editing features can also be obtained by clicking the right mouse button.

To search for text in comments, see the information on the [Global Search](#) command.

Editing Documents

The Report Manager offers many editing features to create and edit both simple text documents and documents with complex formatting, as well as tables and graphics. When a document item is selected in the Table of Contents, a **DOCUMENT** menu appears, displaying all available formatting and editing options. A similar menu can also be obtained by right-clicking anywhere in this document. The toolbar portion directly over the editing area also displays buttons to access the most often-used editing and formatting functions.

Individual documents may also be printed or exported to disk in various file formats such as plain text, Rich Text or HTML format. An **IMPORT** command is also available to read a document file stored in plain text, Rich Text, MS Word, WordPerfect, HTML and a few additional formats. Executing such a command will replace the existing content with the content of the imported file.

Editing Tables

The Report Manager offers many editing features to customize the appearance of a table, to change the text alignment or font setting, to set the cell background color, or to delete entire rows or columns. When a table item is selected in the Table of Contents, a **TABLE** menu become visible displaying all available formatting and editing options. A similar menu can also be obtained by right-clicking anywhere in this table. The toolbar portion above the editing area also displays buttons to access the most often-used

table editing and formatting functions.

Individual tables may also be printed or exported to disk in various file formats such as ASCII (*.TXT), tab delimited file (*.TAB), comma delimited (*.CSV), MS Word (*.DOC), HTML (*.HTM; *.HTML), XML (*.XML) and Excel spreadsheet file (*.XLS).

Editing Charts

Many charts saved in the Report Manager may be edited using many of the same options as those available in QDA Miner, such as the multidimensional scaling plot obtained through the **CODE CO-OCCURRENCE** analysis command, the correspondence analysis plots, and the bar charts and line charts created by the **CODING BY VARIABLES** command, as well as the bar charts and pie charts produced by the **CODING FREQUENCY** command. To obtain information on the display options available for those charts, see their corresponding page in this manual. Other charts - such as dendrograms and heatmaps - are stored as image files, so cannot be modified. However, just like other charts, they may be exported to disk in various file formats such as BMP, JPG or PNG graphic files.

Searching and Replacing Text

Two broad types of text search are available in the Report Manager. A local, item-based search-and-replace feature allows one to perform text searches and replacements on individual documents or tables, and a global search engine for searching text patterns in several or all documents, tables and comments in the Report Manager.

To perform a search in a single document or a table:

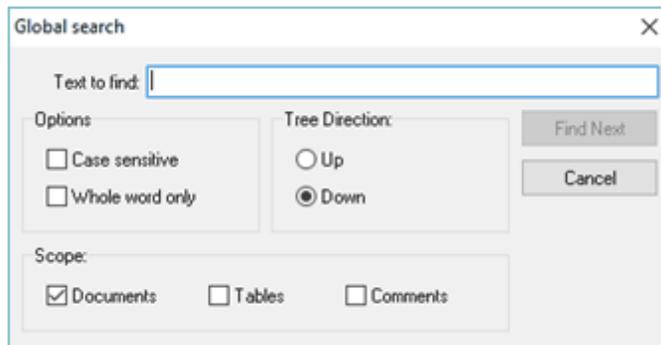
- Select the document or table you would like to search, by selecting its entry in the Table of Contents.
- Position the editing cursor in the document or select the cell in the table where you want the search to begin.
- Select the **FIND** command from the **SEARCH** menu, or click the  button.
- Enter a search expression, set the desired search options and then click **Find Next**.
- To find additional instances of the same text, continue to click **Find Next**.

To replace text in a single document or table:

- Select the document or table in which you would like to perform the text replacement by selecting its entry in the Table of Contents.
- Position the editing cursor in the document or select the cell in the table where you want the search to begin.
- Select the **REPLACE** command from the **SEARCH** menu, or click the  button.
- In **Find What**, type the characters or words you want to find. In **Replace With**, type the text you want to replace it with. Set the desired search options and then click **Find Next**. Click **Replace** to change the selected text. To replace all instances of the text, click **Replace All**.

To perform a global search:

Select the **GLOBAL FIND** method from the **SEARCH** menu. A dialog box similar to this one will appear:



The **Text to Find** edit box allows you to specify the text you want to find. The **Case Sensitive** and **Whole Word Only** options function in the same way as in a standard word processor.

The search starts at the current topic item. Select **Forward** to continue searching items below the current one, or **Backward** to move up and search items above the current document or table in reverse order. To search all items, select the top item in the Table of Contents before using the Global Search dialog box.

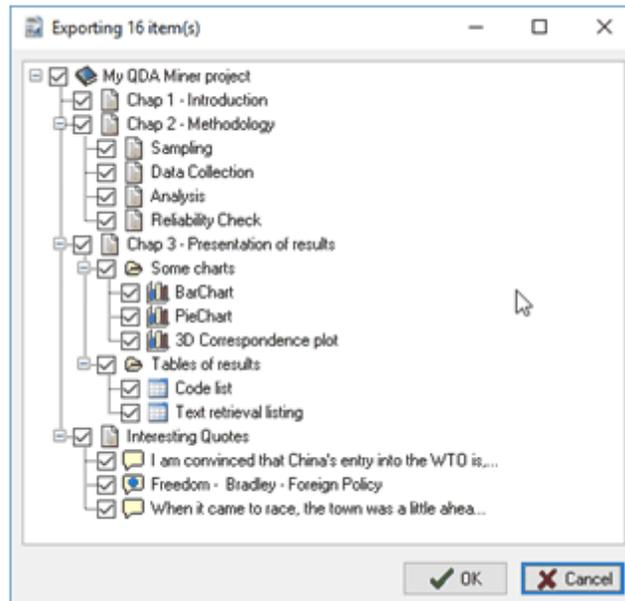
The **Scope** option box is used to specify what is to be searched. You can restrict the search to **Documents**, **Tables**, or **Comments** attached to items, or any combination of these three.

Once the search options have been set, click the **Find** button to start the search as well as to continue searching for additional instances of this text.

Exporting items to HTML or Word

Individual documents, tables, graphics and images may be exported to disk in numerous formats. Such an exportation can be achieved by clicking the  toolbar button or by selecting the **EXPORT** command from the associated menu.

The Report Manager also offers the possibility of exporting the entire content or selected items into a single HTML or MS Word document. The exportation is achieved by selecting the proper command from the **FILE | EXPORT** menu. For example, to export items to HTML, select the HTML command. A dialog box similar to this one will appear.



By default, all items are marked for export. To prevent some items from being included in the exported file, simply remove the check marks beside them. Clicking a "parent" item affects all "children" items in the same way. To unselect all items, uncheck the project item located at the very top of the tree.

Once the selection process is completed, click the **OK** button. A Save File dialog box will be displayed, allowing you to enter a file name and select the location where the file should be saved. After the file is created, you will be asked if you want to view this file. Clicking **Yes** will open a web browser if the exported file is an HTML document or either MS Word or Wordpad if the exported file is a Word document.

Other

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Technical Support

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