

YAC Data Analyzer

version 4.13

QuickStart

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1 Introduction

The YAC Data Analyzer application is intended for analysis of market research data. This document is an introduction to the application and is intended for people, who want to start using it quickly.

In the document "YAC Data Analyzer - User Guide" all functions of the program are described in greater detail.

1.1 Installation

YAC Data Analyzer works on PC compatible computers running an MS Windows operating system; versions 9x, NT, 2000 and higher are supported.

The application doesn't have to be installed in any special way - just copy the files to any folder on your computer (the .exe file, .chm help files, .pdf documentation files, and other files distributed with the application).

Protected data

Please note that some surveys distributed with YAC Data Analyzer are protected against illegal use.

When you buy a license for such data, you have to decide whether it will be a stand alone license for a given computer or a network license.

If it is to be a stand alone license, you have to supply the provider of the data with the computer's code. Use the YCG.exe (YAC Code Generator) program for this.

If it is to be a network license, one computer in your company has to be designated as the license server. Supply the provider of the data with the code of that computer. After you received the data, to use it, the YLSWin.exe (YAC License Server) application must be running on that computer.

In case of network licenses, the user's computer and the server must be able to communicate via the UDP protocol on port 10101.

An exact description of the licensing scheme can be found in the "YAC Data Analyzer - User Guide".

1.2 Contact

If you have and questions concerning this software or procedures explained in this document, please contact:

YAC Software
support@yac.com.pl
www.yac.com.pl

Note

In case of questions concerning the data distributed with the application, or analysis results, please contact the provider of the data.

2 Opening Surveys

To analyze data from a given survey, you have to open that survey. To do this, use the menu **Survey | Open...** A standard open dialog will appear - select a file with the .das extension (Data Analyzer Survey).

After you open a survey, the Survey Manager window will appear. Here you can view basic information about the data. If additional documents are distributed with the data, for instance describing the basic results, methodology, history, questionnaire, etc. an **Information Pages** entry will appear in the left pane on this window.

To analyze data from another survey, just open another `.das` file.

In the **Survey** menu there is also a list of recently opened surveys (under **Recent**). Use this menu to easily change between often used data files.

3 Analyses

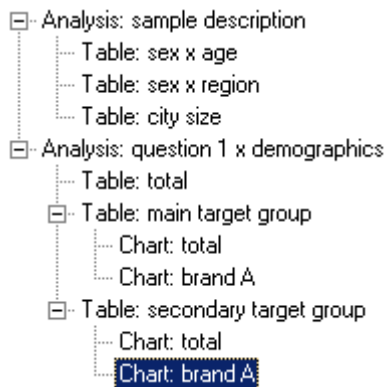
Analyses are used to analyze survey data in YAC Data Analyzer.

An analysis is a set of parameters (such as waves, target groups, questions, statistics) that are placed in tables (layers, rows, and columns). By placing parameters in the table's dimensions you can cross these parameters in a way that is best for a given analysis. You can thus analyze the data in many different ways.

Based on the table, you can define charts; you can have several charts linked to each table.

A set of analyses constitute a report; in one report you can have one or more analyses. Reports are saved to the disk as files with the `.dar` (Data Analyzer Report) extension.

An example report is show below:

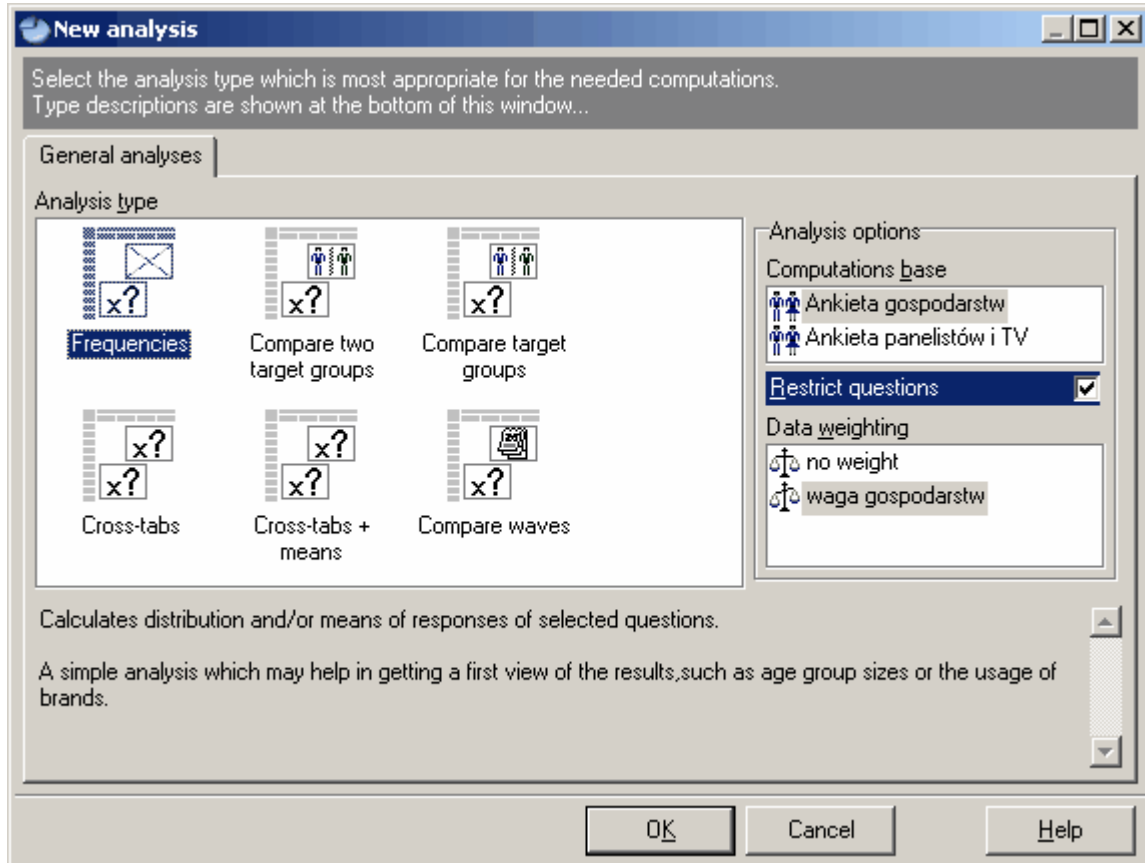


Parameters, tables and charts are described in greater detail in the following chapters. Report functions are described in the [Reports](#) chapter.

3.1 New Analysis Definition

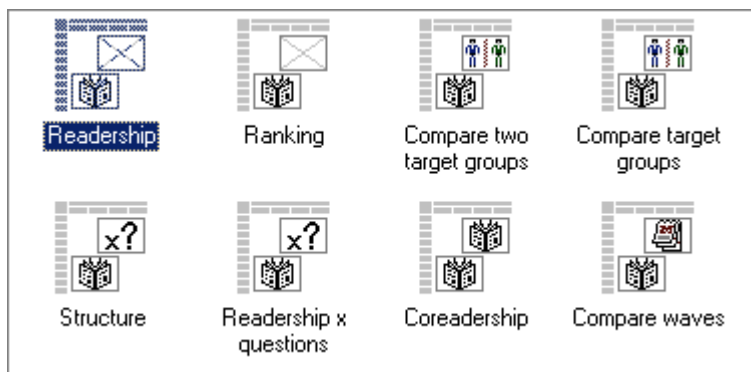
To define a new analysis, selected the **Analysis | New** menu (or the **Ctrl+N** shortcut).

The following dialog window will appear. Available types of analyses, or analysis wizards, will be shown:



At the bottom of the window, a short description of the highlighted analysis type is shown. A double click on one of the wizards (or the **OK** button) will start the definition of an analysis of this type.

The analysis wizards may be shown in several tabs. For instance, on the **Readership analysis** tab visible in the above window (available in press readership surveys), the following elements would be shown:



In the right-hand list of the **New analysis** dialog, available analytical weights are displayed. Select a weight for the new analysis (you can change it later). The list of available weights depends on the configuration of the survey file by the data provider; if only one weight is available in the survey, this list will not be visible.

3.2 Wizards and Parameters

After the selection of an analysis wizard, a series of dialog windows will be shown to the user. Each dialog window is used to define the consecutive parameters of the analysis. Next, these parameters will be placed in the default (for the analysis) dimensions of the newly created table (layers, rows, columns).

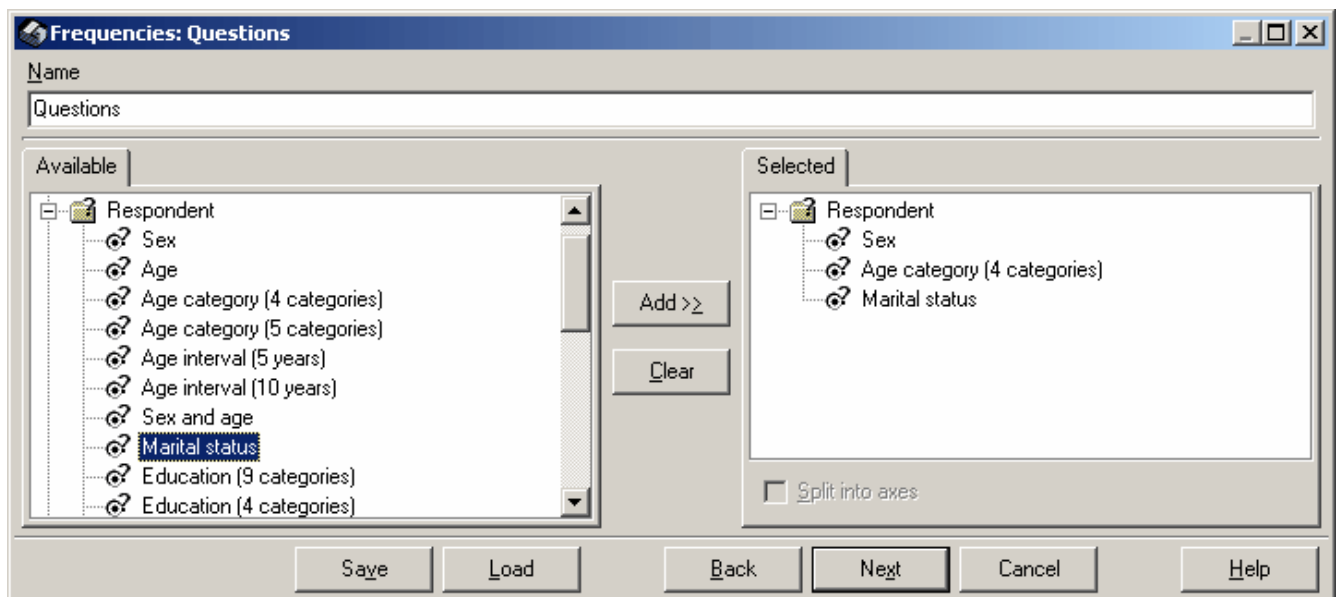
Thus, a **wizard** is actually: a set of parameters and their default locations in the newly created table. There are several wizards available in the program that allow you to quickly create the most common types of analytical tables.

The most often used parameters are:

- waves (for multi-wave surveys),
- target groups,
- questions.

For other wizards (such as in readership surveys) other parameters may be available (e.g. titles, readership indices).

Most of the parameter windows have the following layout: on the left, a list / tree of available items is shown (such as the list of all questions in the survey), on the right - the selected elements are displayed. To move items from the "available" list to the "selected" list, double-click on an item in the left-hand list or use the buttons in between the lists:



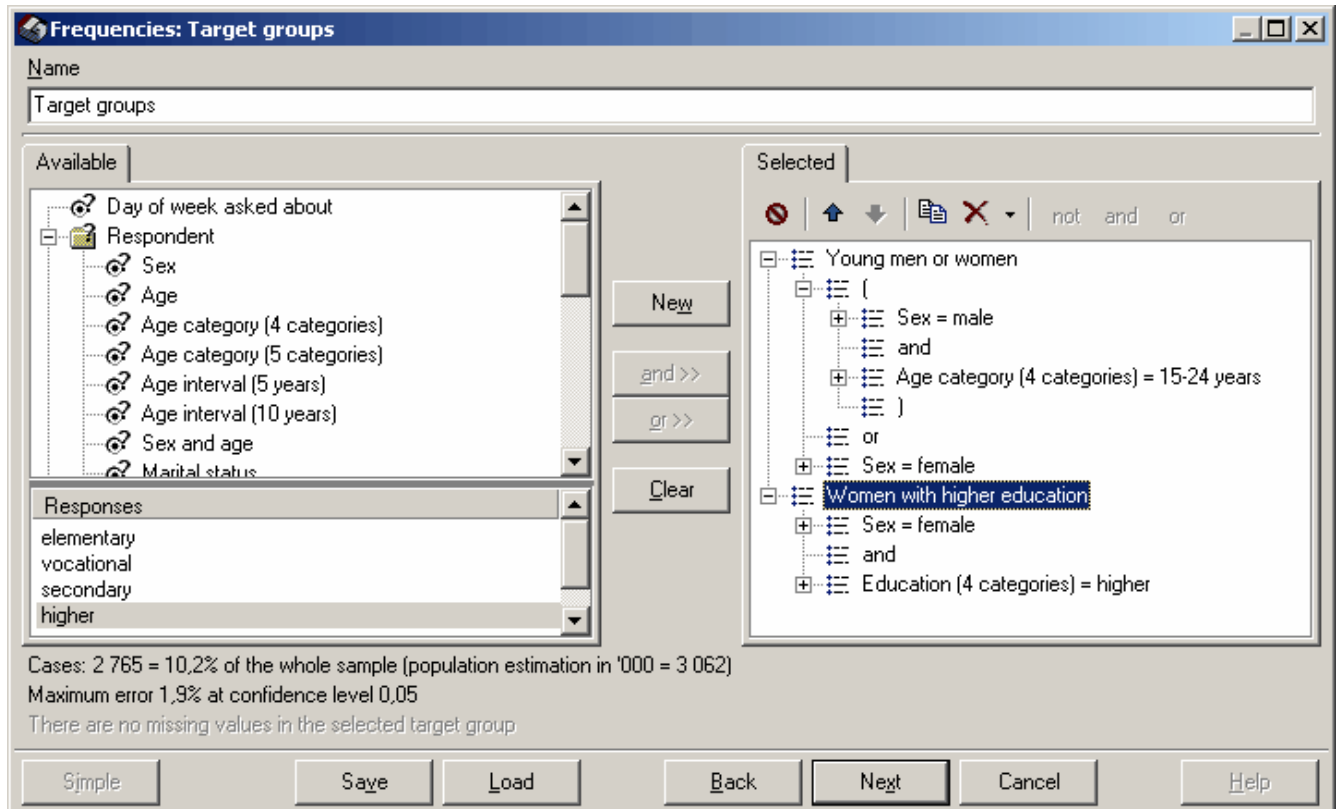
All questions in the survey are displayed on the left. The questions that will be included in the analysis are visible on the right.

When a given parameter definition is used very often (such as the set of selected questions above), it may be tiresome to define such a parameter over and over again. However, once a parameter definition is ready, you can save this definition (the **Save** button) and later, instead of defining it once more, just open it (the **Load** button).

To accept the definition of the current parameter and move to the definition of the next parameter, press the **Next** button.

Some parameters have two versions of the dialog window: for simple and complex definitions. The second version of the dialog window allows for more complex definitions of parameters, however these definitions are usually used by more advanced users.

Below, a dialog window for complex definition of target groups is shown:



3.3 Tables

After you define all parameters, the wizard will automatically prepare a table; that is, it will place the defined parameters in layers, rows and columns:

Report title - click to change

Analysis 1
Table 1

All waves Target group N = 13 056

	A	B	C
1		CntW	Col %
2	Total	13 056	13 056
3	Education (4 categories)		
4	elementary	2 364	18,1
5	vocational	4 854	37,2
6	secondary	4 025	30,8
7	higher	1 789	13,7
8	no answer	24	0,2
9	GUS macroregion		
10	Central	2 214	17,0
11	Wielkopolska	1 749	13,4
12	Slask	2 204	16,9
13	West	1 546	11,8
14	Pomorze	1 360	10,4
15	North-East	902	6,9
16	East	894	6,8

Comments Notes

Data weighting: no weight
N (not weighted) = 13 056

Selected waves: All waves [Month 2003/09 .. Month 2003/01]
Selected target group:
Sex = male

The above window shows a report where:

- the left hand list shows the report structure, or the table of contents; the newly defined table is highlighted,
- on the right, the newly defined table is shown; this wizard placed waves and target groups in layers, questions in rows and statistics in columns,
- there are several tabs with additional information below the table.

3.4 Table Editing

The table was created with previously defined parameters and default settings for the selected wizard. However, the defined table may be modified in several ways.

3.4.1 Change Active Values for Parameters in Layers

Each parameters in layers has one of its values selected as the active value - the whole table is calculated for this single value. However, you can select another value just like you would in any combobox. So, with the following default settings:



A horizontal bar with a dark grey background. On the left, there is a dropdown menu with 'All waves' selected. To its right is another dropdown menu with 'Men' selected. On the far right, the text 'N = 13 056' is displayed.

you can quickly change waves, for instance:

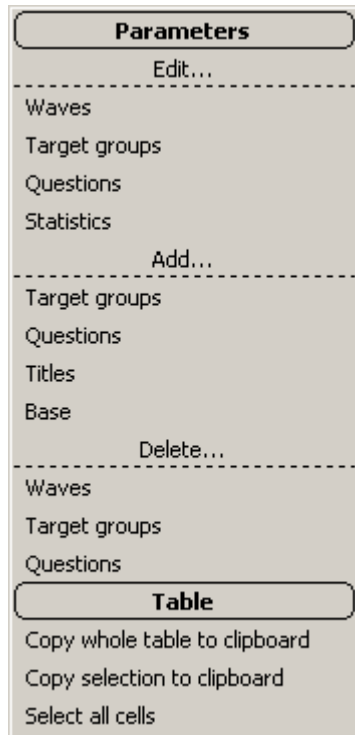


A horizontal bar with a dark grey background. On the left, there is a dropdown menu with 'Month 2003/07' selected. To its right is another dropdown menu with 'Men' selected. On the far right, the text 'N = 1 432' is displayed.

After this change, the table will be automatically recalculated (please note the change in the count on the right-hand side of the above bar; the number of men surveyed in July 2003 is shown; previously, the number of all surveyed men was shown).

3.4.2 Edit, Add and Remove Parameters

Parameters that are in the table can be edited and / or deleted. New parameters may also be added and placed in one of the table's dimensions. All these operations are available through the table's local menu - right click on the table to view this menu:



In the first part of the menu (under the **Edit...** header) parameters currently in the table are shown. Select one of the parameters to change its definition (such as change the set of questions or change the target group). After you accept the new definition, the table will be automatically recalculated.

In the next section (under the **Add...** item) parameters that can be added to the table are shown. These can be parameters other than the wizard's starting parameters, that is, all parameters that are available in the survey. But there is also the possibility to add the same kinds of parameters as those currently in the table, such as another **Questions** parameter (for instance, there are two **Questions** parameters in cross-tabs). The table will be updated and automatically recalculated after a parameter is added.

In the last section concerning parameters (under the **Delete...** header), parameters that can be deleted from the table are shown. Not all parameters may be deleted - for instance, there is no sense in deleting the **Statistics** parameter. After a parameter is deleted, the table will be updated and recalculated.

3.4.3 Table Edit Mode

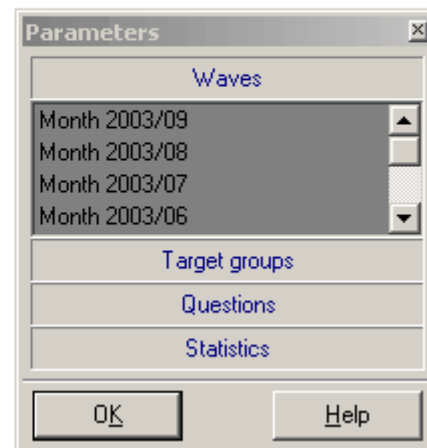
The previously mentioned operations allowed for changing active values of parameters in layers, and to edit parameters in the table, add parameters to the table, or delete parameters from the table.

However, tables in YAC Data Analyzer are pivot tables, which means that parameters may be moved between the table's dimensions. To do this, you have to switch to edit mode with the tool button (placed in the toolbar above the table):



New panels and a new (**Parameters**) window will be displayed:

	A	B	C
1		CntW	Col %
2	Total	1 432	1 432
3	Education (4 categories)		
4	elementary	247	17,2
5	vocational	527	36,8
6	secondary	453	31,6
7	higher	202	14,1
8	no answer	3	0,2
9	GUS macroregion		
10	Central	255	17,8
11	Wielkopolska	176	12,3
12	Slask	254	17,7
13	West	168	11,7
14	Pomorze	148	10,3
15	North-East	99	6,9
16	East	99	6,9
		3	16,3



The panel in the lower left shows row parameters (here: **Questions**). The panel in the upper right shows column parameters (here: **Statistics**). The **Parameters** window displays all parameters currently available in the analysis.

3.4.3.1 Moving Parameters between Dimensions

To move a parameter between dimensions, click on it with the mouse, and while holding down the button, move the parameter from one dimension to another. When the dragged parameter is over a dimension's panel, the panel's color will change from dark blue to gray.

If you drop the parameter outside any of the dimensions, the parameter will be deleted from the table. The parameter will still be available in the analysis, but it won't be in any of the dimensions (and it will not take part in the calculations). Parameters may also be moved between the **Parameters** window and the table's dimensions.

We have already seen that multiple parameters may be placed in layers. Multiple parameters may also be placed in rows and in columns - these parameters will be then nested. See example below (**Waves** were moved from layers to columns):

The screenshot shows the YAC Data Analyzer interface. At the top, a dropdown menu is set to 'Men' and the sample size is 'N = 1 432'. The main table has four columns: A, B, C, and D. Row 1 contains 'Total', 'CntW', and 'Col %'. Row 2 is the header for 'Education [4 categories]'. Rows 3-18 show 'elementary' in column A and various dates in column B. A 'Questions' panel is overlaid on the table, showing 'Waves' and a list of dates. To the right, a 'Parameters' dialog box is open, showing 'Waves' and a list of dates, with buttons for 'OK' and 'Help'.

This way you can build all kinds of tables with parameters nested in rows and / or in columns.

3.4.3.2 Editing Parameters

When in edit mode, you can also edit parameters. Double-click on the parameter's header and the parameter's definition dialog window will be shown.

Note that in edit mode, after editing the parameter the table will not be recalculated. The table will be recalculated after you exit the edit mode (and after all changes to the table's parameters - their positions and definitions - are made).

3.4.3.3 Ending the Edit Mode

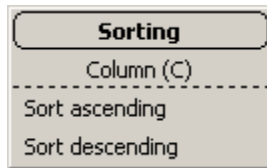
Click on the tool button to exit edit mode:



Now, the table will be automatically recalculated taking into consideration all changes made in edit mode.

3.4.4 Sorting

To sort a table, click with the right mouse button on the column's or row's header. The following local menu will appear:



You can sort a table in ascending or descending order (by values in the selected row or column). Another click on the column or row allows you to change the sorting order or to turn off sorting completely.

Note

The table may be sorted in rows and in columns simultaneously.

3.4.5 Copying to the Clipboard

In the table's local menu there are items that allow you to copy the results to the clipboard. Then you can paste those results in other applications, such as spreadsheets or word processors.

The results may be copied with information about the analysis and parameter definitions.

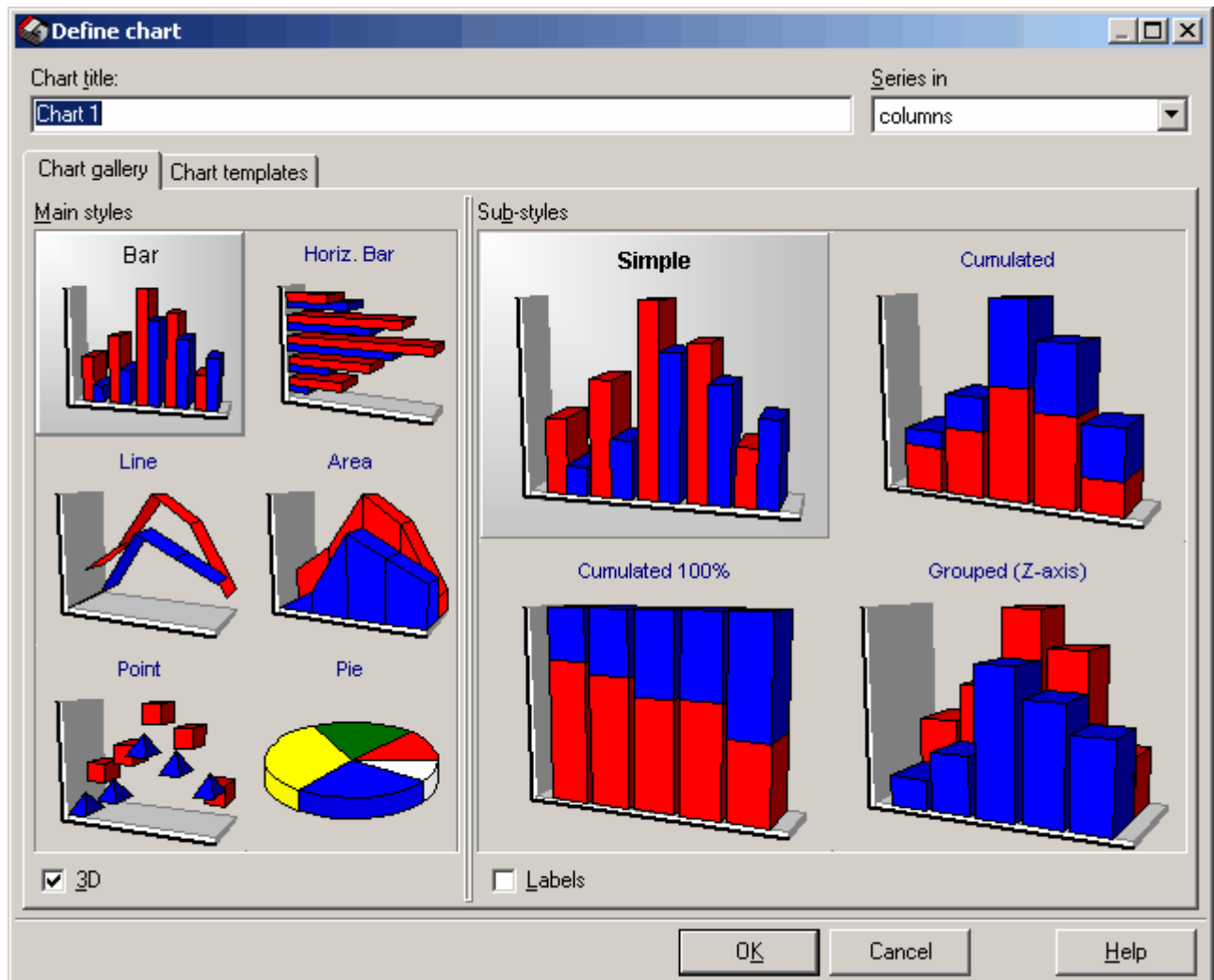
3.5 Charts

You can define charts based on the results a table's results.

Before you define a chart, select a block in the table (either by clicking on row / column headers or by selecting a range of cells), next click this tool button:



The following window will appear - select one of the available chart types:



The main chart types are shown on the left. On the right, sub-types are displayed (for the selected chart type on the left). Moreover, you can:









- edit the chart's title,
- select, whether series are in rows or columns,
- select, whether this should be a 2D or a 3D chart,
- select, whether value labels should be visible.

On the second tab (**Chart templates**) you can select a user-defined chart type. This is described in the [Chart templates](#) section.

3.5.1 Editing

After you select a chart type, the chart will be added to the report as a sub-element of the table.

The following tool buttons may be used to edit the chart:

	copy the chart to the clipboard as a bitmap or a meta file
	change between 2D and 3D look
	turn on or off perspective in 3D charts
	advanced options
	switch modes between scrolling the chart with the mouse and between selecting an area for magnification
	change direction of the data series (between rows and columns)
	save chart settings as a template
	apply a previously saved template to the current chart

The advanced options tool button allows you to defined all aspects of the chart: series types and colors, title and legend placements and fonts, axis check marks, etc.

3.5.2 Chart Templates

The program allows you to automatically format charts according to several predefined settings. Next, these charts may be edited via tool buttons described in the previous section.

Because such formatting may be time consuming (if, for instance, the company's color scheme is very different from the standard ones), a chart may be saved as a template. Next, this template may be applied to existing charts and may be used when defining new charts.

Saved templates are available in the **Chart templates** tab in the chart definition dialog window. To save a chart as a template, use the tool button:



To apply a template to an existing chart, use this tool button:



3.5.3 Copying to the Clipboard

To copy a chart to the clipboard, use the following tool button:



You can paste charts copied to the clipboard into other applications, such as spreadsheets or presentation programs.

However, please note that this chart will be copied as an image - no data will be copied with the chart. After you change the data, the copied chart will remain the same (but it will be automatically updated in the YAC Data Analyzer report).

To export charts with data, you have to [export](#) reports to other applications (see the [Reports](#) chapter).

4 Reports

In YAC Data Analyzer, reports are files that can contain one or more analyses (where an analysis is a set of tables and charts).

In the **Report** menu, all options for handling reports may be found.

4.1 Saving and Opening

To save a newly created report, use the menu **Report | Save** or **Report | Save as...**

Under the **Report | Recent** item, recently opened reports are shown. Select one to open it. Use the **Report | Open...** menu to open any report on the disk. Report files have the `.dar` (Data Analyzer Report) extension.

Note

Reports may be opened in YAC Data Analyzer, only. However, tables and charts may be copied to the clipboard or [exported](#) to other applications.

4.2 Moving and Copying Elements

To change the order of report elements, use the tool buttons:



These buttons are placed above the report's table of contents.

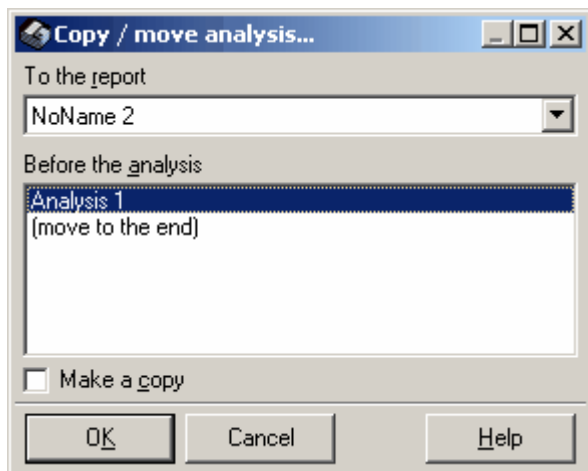
To duplicate report elements (analyses, tables, charts) use the following tool button:



A table will be duplicated together with charts linked to the table. The duplicated table will be placed in the current report.

A chart will be duplicated as a new chart in the same table.

When copying whole analyses, you have the option to duplicate an analysis, to move it to another opened report or to copy it to another opened report:



In the field **To the report** select the destination report (one of the opened ones). The analysis will be moved / copied to that report.

In the field **Before the analysis** select the analysis, before which the current analysis will be placed.

Turn the **Make a copy** check box on to make a copy of the report. Leave it off to move the report.

4.3 Printing and Exporting

Reports (all or selected elements) may be printed via the **Report | Print...** menu and exported to MS Excel via the **Report | Export...** menu.

In the second case, tables and charts will be placed in an MS Excel workbook as consecutive sheets. The charts will be standard Excel charts with all possibilities of modification that are available in the spreadsheet. However, not all format settings will be exported since charts in Excel have less settings than charts in YAC Data Analyzer.

5 Examples

In this chapter, several standard applications of data analysis will be discussed (in the context of the YAC Data Analyzer program). All steps will be described that lead to the analyses.

In the following descriptions, we assume that the program is running and that [a survey has been opened](#).

Note

Question names may be different between the examples and the survey available to you.

5.1 Responses to One or More Questions

We want to check the brands of mother boards and amounts of memory in respondents' computers.

Steps:

1. In the **Analysis** menu select the **New...** item (or press **Ctrl+N**).
2. In the **New analysis** dialog window select **Frequencies** in the **General analysis** tab.
3. If **Waves** is the first parameter that appears (in multi-wave surveys), press the **Next** button (for this analysis we will select all available waves).
4. In the **Target groups** dialog window, press the **Next** button, also (for now we will analyze the whole sample).
5. In the **Questions** dialog window, find the interesting questions in the left list. To include these questions in the analysis, move these questions to the right list by double clicking on the questions or by pressing the **Add >>** button. Let's select the *"Motherboard"* and *"Memory"* questions.
6. In the **Statistics** dialog window the program will automatically select two statistics: **Count (weighted)** and **Column percent**. When computing frequencies, these statistics will probably suffice. Thus, press the **Next** button.
7. In the last dialog of the wizard press the **Finish** button.

Example output:

	A	B	C
1		CntW	Col %
2	Total	2 000	2 000
3	Motherboard		
4	Abit	193	9,7
5	Asus	261	13,1
6	ECS	449	22,5
7	MSI	253	12,7
8	Shuttle	507	25,4
9	other	337	16,9
10	Memory		
11	64 MB	253	12,7
12	128 MB	465	23,3
13	256 MB	517	25,9
14	512 MB	516	25,8
15	1024 MB	249	12,5

5.2 Means from One or More Questions

We want to check what is the average household size in the sample.

Steps:

1. In the **Analysis** menu select the **New...** item (or press **Ctrl+N**).
2. In the **New analysis** dialog window select **Frequencies** in the **General analysis** tab.
3. If **Waves** is the first parameter that appears (in multi-wave surveys), press the **Next** button (for this analysis we will select all available waves).
4. In the **Target groups** dialog window, press the **Next** button, also (for now we will analyze the whole sample).
5. In the **Questions** dialog window, find the interesting questions in the left list. To include these questions in the analysis, move these questions to the right list by double clicking on the questions or by pressing the **Add >>** button. Let's select the *"Household size"* question.
6. In the **Statistics** dialog window the program will automatically select two statistics: **Count (weighted)** and **Column percent**. Other statistics may be added from the left list by double clicking on the statistics. Statistics may also be deleted from the right-hand list (and thus from the analysis) by double-clicking on its name in the list on the right. After adding the **Column mean** statistic, press the **Next** button.
7. In the last dialog of the wizard press the **Finish** button.

Example outputs:

	A	B	C	D
1		CntW	Col %	Col Mean
2	Total	2 000	2 000	2 000
3	Household size			
4	1 person [1]	269	13,5	3,00
5	2 people [2]	472	23,6	
6	3 people [3]	506	25,3	
7	4 people [4]	502	25,1	
8	5 people or more [5]	251	12,6	

All responses are displayed, because distribution statistics were also selected for the analysis. By each response, the response's code is displayed; this code is used when computing means. If in step 6 after adding **Column mean** we would delete **Count (weighted)** and **Column percent**, the table would look as follows:

	A	B
1		Col Mean
2	N =	2 000
3	Household size	
4	[1; 2; 3; 4; 5]	3,00

Below the *"Household size"* question text, response codes are displayed.

5.3 Results in the Selected Target Group

We want to check, what is the total household income of respondents with higher education.

Steps:

1. In the **Analysis** menu select the **New...** item (or press **Ctrl+N**).
2. In the **New analysis** dialog window select **Frequencies** in the **General analysis** tab.
3. If **Waves** is the first parameter that appears (in multi-wave surveys), press the **Next** button (for this analysis we will select all available waves).
4. In the **Target groups** dialog window find the question *"Education"*. After you highlight this question, a list of responses will be displayed in the lower left-hand list: *"primary"*, *"vocational"*, *"secondary"*, and *"higher"*. Double click on the last response - this will define a target group consisting of better educated respondents. Next press the **Next** button.
5. In the **Questions** dialog window, find the income question in the left list. To include these questions in the analysis, move these questions to the right list by double clicking on the questions or by pressing the **Add >>** button. Let's select the *"Total household income"* question.
6. In the **Statistics** dialog window the program will automatically select two statistics: **Count (weighted)** and **Column percent**. When computing frequencies, these statistics will probably suffice. Thus, press the **Next** button.
7. In the last dialog of the wizard press the **Finish** button.

Example output:

	A	B	C
1		CntW/	Col %
2	Total	192	192
3	Total household income		
4	up to 750 PLN	11	5,7
5	751-1000 PLN	18	9,4
6	1001-1250 PLN	43	22,4
7	1251-1500 PLN	25	13,0
8	1501-2000 PLN	18	9,4
9	above 2000 PLN	21	10,9
10	refused to answer	56	29,2

The definition of the selected target group is displayed below the table, in the **Comments** tab.

5.4 Compare Results between Two Target Groups

We want to check, what is the total household income of respondents with higher education and how does this income compare to household income of respondents with education that is less than higher.

Steps:

1. In the **Analysis** menu select the **New...** item (or press **Ctrl+N**).
2. In the **New analysis** dialog window select **Compare two target groups** in the **General analysis** tab.
3. If **Waves** is the first parameter that appears (in multi-wave surveys), press the **Next** button (for this analysis we will select all available waves).
4. In the **Target groups 1** dialog window find the question *"Education"*. After you highlight this question, a list of responses will be displayed in the lower left-hand list: *"primary"*, *"vocational"*, *"secondary"*, and *"higher"*. Double click on the last response - this will define a target group consisting of better educated respondents. Next press the **Next** button.
5. In the **Target groups 2** dialog window define a target group, that includes all responses except *"higher"*.
6. In the **Questions** dialog window, find the interesting questions in the left list. To include these questions in the analysis, move these questions to the right list by double clicking on the questions or by pressing the **Add >>** button. Let's select the *"Total household income"* question.
7. In the **Statistics** dialog window the program will automatically select two statistics: **Count (weighted)** and **Column percent**. When computing frequencies, these statistics will probably suffice. Thus, press the **Next** button.
8. In the last dialog of the wizard press the **Finish** button.

Example output:

	A	B	C	D
1		Total	Target group 1	Target group 2
2	N =	2 000	192	1 794
3	Total household income			
4	up to 750 PLN	5,3	5,7	5,4
5	751-1000 PLN	15,8	9,4	16,5
6	1001-1250 PLN	16,6	22,4	15,9
7	1251-1500 PLN	13,5	13,0	13,4
8	1501-2000 PLN	9,9	9,4	9,9
9	above 2000 PLN	9,3	10,9	9,1
10	refused to answer	29,7	29,2	29,8

The definitions of the target groups are displayed below the table, in the **Comments** tab.

5.5 Relationship between Two Questions

We want to check how household income depends on the region.

Steps:

1. In the **Analysis** menu select the **New...** item (or press **Ctrl+N**).
2. In the **New analysis** dialog window select **Cross-tabs** in the **General analysis** tab.
3. If **Waves** is the first parameter that appears (in multi-wave surveys), press the **Next** button (for this analysis we will select all available waves).
4. In the **Target groups** dialog window, press the **Next** button, also (for now we will analyze the whole sample).
5. In the **Questions in columns** dialog window, find the interesting questions in the left list. To include these questions in the analysis, move these questions to the right list by double clicking on the questions or by pressing the **Add >>** button. Let's select the *"Total household income"* question.
6. In the **Questions in rows** select another questions, such as *"New voivodeship"* (the division of Poland into the largest administration units).
7. In the **Statistics** dialog window the program will automatically select several statistics that are used when analyzing cross-tabs. You can press the **Next** button.
8. In the last dialog of the wizard press the **Finish** button.

Example output (only a part of a larger table is shown below):

	A	B	C	D	E	F
1		Total	Total household income			
2			up to 750 PLN	751-1000 PLN	1001-1250 PLN	1251-1500 PLN
3	N =	2 000	107	315	331	270
4	New voivodeship					
5	dolnoslaskie	6,1	3,7	7,6	6,6	7,0
6	kujawsko-pomorskie	5,3	5,6	5,1	6,3	4,4
7	lubelskie	4,7	3,7	5,4	5,4	1,5
8	lubuskie	2,9	2,8	4,1	1,5	2,2
9	lodzkie	8,9	5,6	7,6	10,9	10,4
10	malopolskie	8,8	5,6	8,3	5,7	11,1
11	mazowieckie	12,8	12,1	12,7	12,7	13,7
12	opolskie	2,4	5,6	2,5	2,4	1,9
13	podkarpackie	4,6	6,5	6,0	4,5	2,6
14	podlaskie	3,1	4,7	3,2	2,1	4,8
15	pomorskie	4,7	4,7	5,7	5,1	5,2
16	slaskie	15,2	15,9	11,4	16,3	16,3
17	swietokrzyskie	4,3	3,7	4,8	3,0	4,8
18	warminsko-mazurskie	4,6	8,4	4,4	5,1	3,7
19	wielkopolskie	7,7	6,5	7,6	7,3	5,9
20	zachodniopomorskie	4,2	4,7	3,5	4,8	4,4

5.6 Trends in Consumer Behaviors

We want to check how household income changes with time.

Note

This type of analysis is available in multi-wave surveys only.

Steps:

1. In the **Analysis** menu select the **New...** item (or press **Ctrl+N**).
2. In the **New analysis** dialog window select **Compare waves** in the **General analysis** tab.
3. In the **Waves** dialog window, click the **Next** button to select all waves.
4. In the **Target groups** dialog window, press the **Next** button, also (for now we will analyze the whole sample).
5. In the **Questions** dialog window, find the interesting questions in the left list. To include these questions in the analysis, move these questions to the right list by double clicking on the questions or by pressing the **Add >>** button. Let's select the *"Total household income"* question.
6. In the **Statistics** dialog window the program will automatically select several statistics that are used when analyzing cross-tabs. You can press the **Next** button.
7. In the last dialog of the wizard press the **Finish** button.

Example output (only a part of a larger table is shown below):

	A	B	C	D	E
1		Total	Wave 10	Wave 9	Wave 8
2	N =	2,000	200	200	200
3	Total household income				
4	up to 750 PLN	5,3	12,5	5,0	4,0
5	751-1000 PLN	15,8	12,0	21,0	14,5
6	1001-1250 PLN	16,6	13,5	13,5	17,0
7	1251-1500 PLN	13,5	12,0	13,0	17,5
8	1501-2000 PLN	9,9	8,0	15,5	8,5
9	above 2000 PLN	9,3	14,0	7,0	14,0
10	refused to answer	29,7	28,0	25,0	24,5

5.7 Responses to Complex Questions

Complex questions are questions that take on the form of a table in the questionnaire (also: a series of scales). Several examples are shown below:

Please indicate the responses you agree with:

	<i>I decidedly agree</i>	<i>I agree</i>	<i>I disagree</i>	<i>I decidedly disagree</i>
<i>I love pizza</i>				
<i>I'm afraid of spiders</i>				
<i>TV should be banned</i>				

Another example of a complex question:

Indicate all brands that fit to the given statements (for each statement you may select several brands)

	<i>brand A</i>	<i>brand B</i>	<i>brand C</i>
<i>too bitter</i>			
<i>nice color</i>			
<i>strong</i>			
<i>adequate price</i>			

To analyze this type of questions, select the **Complex questions** wizard.

Note

This wizard will be available if there are complex questions defined in the survey.

Steps:

1. In the **Analysis** menu select the **New...** item (or press **Ctrl+N**).
2. In the **New analysis** dialog window select **Complex questions** in the **General analysis** tab.
3. If **Waves** is the first parameter that appears (in multi-wave surveys), press the **Next** button (for this analysis we will select all available waves).
4. In the **Target groups** dialog window, press the **Next** button, also (for now we will analyze the whole sample).
5. In the **Questions** dialog window, find the interesting question in the left list. Only complex questions are shown. Include one of these questions in the analysis by double clicking on the question or by pressing the **Add >>** button.
6. In the **Statistics** dialog window the program will automatically select several statistics that may be useful in the analysis. You can press the **Next** button.
7. In the last dialog of the wizard press the **Finish** button.

Example output:

	A	B	C	D	E	F
1		Opinions x Evaluations - Evaluations				
2		definitively disagr...	rather disagrees	neither agrees nor...	rather agrees	definitively agrees
3		Opinions x Evaluations - Opinions				
4	Opinion A	30,0	30,0	20,0	10,0	10,0
5	Opinion B	50,0	50,0	0,0	0,0	0,0
6	Opinion C	20,0	20,0	20,0	20,0	20,0
7	Opinion D	20,0	30,0	10,0	30,0	10,0