

Dear friends of Survey Solutions,

In version 5.3.0 that we have released on December 1, 2015 you will find the following useful new features:

- Macros: simplify writing complex expressions that refer to repeating expressions;
- Copy/Paste of questions and groups in the questionnaire and between the questionnaires;
- Multiple choice question with explicit Yes/No options;
- Change of the export format for multiple choice questions;
- Background data export;
- New function to validate emails: IsValidEmail();
- Clickable email contacts;

There are also new restrictions that the users must be aware of:

- No fractional or negative options are allowed in multi-select questions; existing
 questionnaires with these options will be exported in the new format with special
 substitutions as outlined in details below;
- Observer users are no longer permitted to export the whole dataset; they can still review each interview individually;
- Users should not use double underscore in variable names; these names will be considered invalid in the next version (effective 2016).

Macros

Macros are a new designer feature that simplify writing complicated expressions with repetitive sub-expressions. Consider for example, that several questions in the questionnaire are applicable to one group of persons, such as women of child-bearing age (let's say 15-44 years old, exact numbers are of no particular importance here). Suppose the variable for age is *age*, and for gender is *sex* with values 1 corresponding to males, and 2 to females. Then the following macro can be defined:

It can be subsequently used in the enabling conditions for each question directed at the women of childbearing age simply as \$c, which will be substituted literally with the content of the macro as defined above.

To define a macro, call the macro definitions panel by clicking the corresponding icon:



Then define the macro name, content, and (optionally) a commentary describing the macro definition:



Macros have several notable advantages:

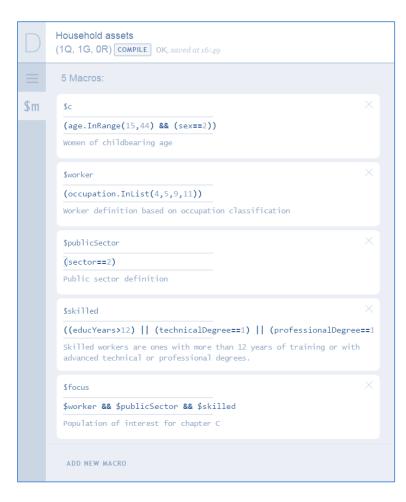
- 1) If we need to change the definition of the macro, say change the upper age limit from 44 to 45, there is a single place in the questionnaire where we need to do this;
- groups of questions become more movable when copying a group of questions to a different questionnaire, one can change the variable names in the definition of the macro to match the new questionnaire, again, making it simpler to integrate it into a different questionnaire;
- 3) the conditions can be much more readable, such as:

\$worker && \$publicSector && \$skilled

Where, for example, the each individual macro could be defined as follows:

```
$worker=(occupation.InList(4,5,9,11))
$publicSector=(sector==2)
$skilled=((educYears>12) || (technicalDegree==1) || (professionalDegree==1))
```

These values will be substituted literally into the expression that refers to macros. Note that macro definitions may not refer to other macros.



Refer to the Designer user's guide for more details and examples on the usage of macros.

Copy/Paste of questions and groups of questions.

Almost every survey is similar to a large extent to some other survey, and many users administer the same questionnaire with trivial changes in several countries. This is easy in Survey Solutions with the cloning of the questionnaire and subsequent trimming of undesirable questions, and adding new ones.

However, there are other situations, when a user wants to borrow just a part (say one module on birth histories, health outcomes, or employment situation) from a different questionnaire into her own. In earlier versions the questions had to be replicated manually, but now a copy/paste feature has been introduced. It allows to transfer one question, a group of questions (subsection) or a roster from one questionnaire to another. Any item from the questionnaire tree can be copied in such a way: a section, sub-section, roster or an individual question. For this task the context menu of these elements has been extended to include the *copy* and *paste after* items.



There are a few things to be aware of:

1) Copying sections from a different questionnaire doesn't necessarily create a valid questionnaire. The copied questions may refer to the variables that don't exist in the new questionnaire or contain variable names already utilized elsewhere in the new questionnaire. These inconsistencies must be resolved with manual edits.

- 2) Copying and pasting must be done with the same browser. One can't copy and paste to a different browser or any other program.
- 3) Rosters may not be pasted as the top-level elements (sections); instead rosters must be inserted into an existing section (or sub-section).

Multi select categorical questions with explicit Yes/No options.

Traditional presentation of multi select categorical questions left ambiguous the response of the respondent under the circumstances when a refusal can be obtained for particular item (say the respondent confirmed presence of a fridge and a microwave, confirmed absence of the tv and radio, but didn't answer on the presence of a mobile phone in the household assets multiple select question).

Survey Solutions version 5.3 introduces a new mode of presenting the multiple select questions with explicit yes and no questions. The analyst no longer has to make an assumption that the absence of a check means "no". Now the answer "yes" definitely designates the item is selected, the answer "no" definitely designates the item is not selected, and absence of any selection means a missing value (refusal, don't know, not applicable, etc).

HOUSEHOLD ASSETS /				
Que	stion type	Variable name(?)	Variable name(?)	
0	Categorica	l: Multi-select / # mcq		
Variable label(?)				
Assets				
Question text				
Which household assets are present in your household?				
	1	Fridge	\times	
	2	Microwave	\times	
	3	TV	\times	
	4	Radio	× × × ×	
	5	Phone (land line)	\times	
	6	Phone (mobile)	\times	
	ADD OPTION SHOW STRINGS			
	☐ Record answer order			
	Yes/No mode Yes/No mode			

Change of the export format for multiple choice questions

Previous versions of Survey Solutions exported data in the "choices" layout, where each of the multiple variables generated from a the multiselect question was corresponding to a choice.

Now Survey Solutions exports dummy variables with fixed meaning:

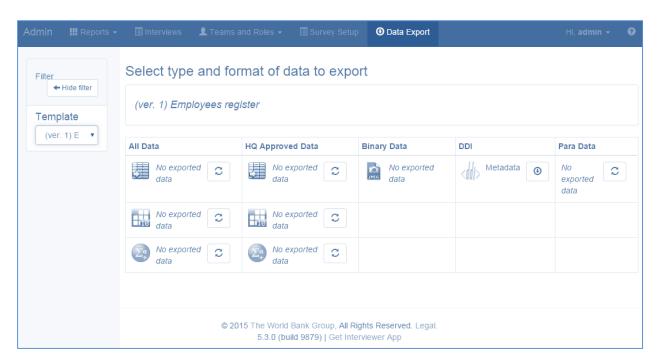
- 1 means the item was selected as "yes";
- 0 means item was selected as "no"; and
- missing value means no particular selection was made regarding this particular item.

Variable names are based on the template: mcq_CODE, where mcq is the original variable name entered by the designer; and CODE is the numeric value corresponding to this option (also entered by the designer).

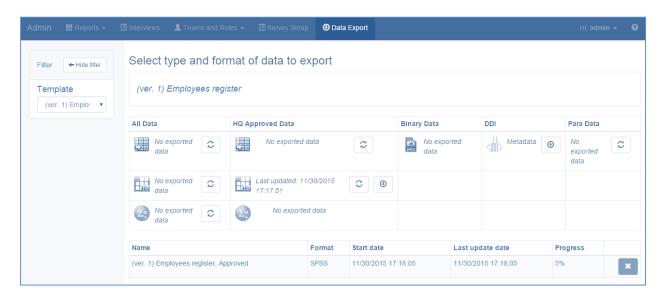
In case of ordered multiple select categorical questions the values of selections will be positive numbers 1,2,3,etc corresponding to the order of selection. Only order of positive selections is tracked, all negative selections have the same value 0.

Background data export

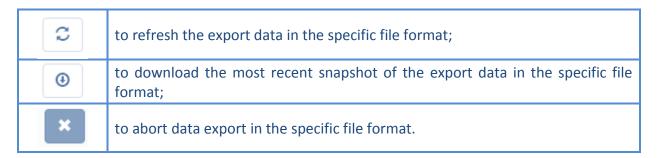
Data export can occupy a considerable time and as the survey grows export procedures should not obstruct the normal functioning of the server. That's why in the new version of Survey Solutions the export data screen has been revised:



Now the results of the last export are immediately available, and can be refreshed on demand. Any headquarter or administrator user can initiate the refreshing of the export data, though usually only one is designated responsible for this task. Pending export requests are listed under the list of data formats. The date and time of the export snapshot are shown next to it.



Use the following buttons:



New function to validate emails: *IsValidEmail()*.

The new function <code>IsValidEmail()</code> is introduced to solve the common task of validation of whether a particular text response can represent a valid email. For example, email.IsValidEmail(email) is equal to logical <code>true</code> when variable email contains value "<code>support@mysurvey.solutions</code>" and it contains logical <code>false</code> when the variable email contains value "<code>support.mysurvey.solutions</code>" (erroneous email, which doesn't contain a mandatory @-sign).

Note that despite its name one can use this function in validation and in enabling conditions, for example, to ask for an additional phone number if the given email was determined to be invalid.

Clickable email contacts

Supervisor and headquarter users working with the web interface will notice the contact emails entered for users are clickable, and when clicked the default emailing application will start to facilitate sending emails to that user. Emails are not sent automatically and it is up to the supervisor or the headquarter user to compose the message.

If there is no emailing application on the computer where the supervisor or headquarter users work either nothing will happen or the operating system will offer to install and configure one. If the link was clicked in an error, just cancel.

New Limitations

Survey Solutions users must be aware of the following new limitations:

- non-integer and negative values should not be used for codes in multi-select categorical
 questions. In existing questionnaires imported to servers where data is already collected
 the values will be replaced with "_" for dot and with "n" for negative sign in variable
 names;
- observer users no longer have an ability to export the data; headquarter and administrator users can still download the full data files;
- when designing the questionnaires users should avoid double underscores in variable names. While currently permitted this combination will be prohibited in future versions.