Survey Solutions

Dear friends of Survey Solutions!

We are happy to inform you about our new release of Survey Solutions 4.1. You will notice improvements in the interface and capabilities of the system, many of which are suggested by the actual users just like you while applying Survey Solutions in their survey data collection.

Survey Solutions 4.1 provides a lot of improvements that would be especially valuable for the users facilitating large surveys. We describe these changes below.
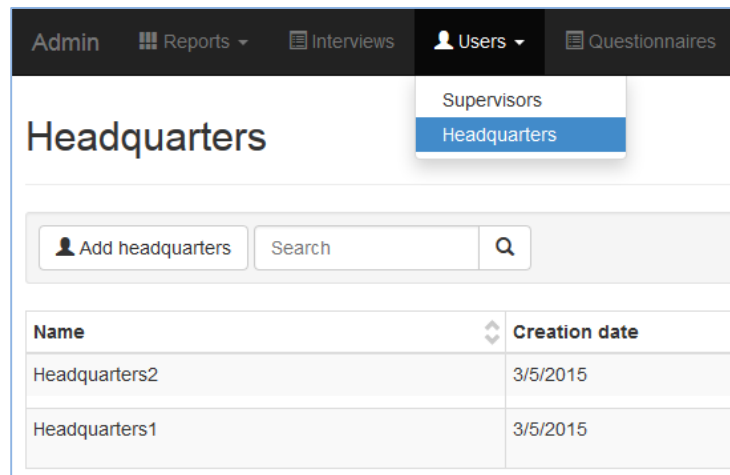
The footprint of the Survey Solutions database on the server has been significantly reduced. This makes it more suitable for larger surveys, as the servers can now accommodate more data, respond faster, and maintenance also simplifies: the size of the backup files has decreased accordingly, and backups can complete faster.

The strict hierarchical system of users in Survey Solutions presented a challenge in situations where large teams of interviewers could submit a lot of data for approvals and overwhelm the headquarter user. But not anymore: since version 4.1 multiple headquarter users can be created by the (newly introduced) server administrator user. With this new feature any required number of the headquarter users can be created for the headquarters and they can approve or reject interviews submitted by any supervisors teams. If you are managing a large survey, you may want to introduce a protocol determining responsibilities of different headquarter users for different geographical regions, teams of interviewers, or let them work all together reviewing all incoming interviews in any desired order. This change is expected to improve the throughput of the system, as well as devote more time for reviewing the received data for errors, resulting in better data quality.

The new server administrator role is a powerful role that not only has the capability to create multiple headquarter users, but also perform all the actions a headquarter user can do. If you are managing a small scale survey and feel one user at headquarter level is sufficient, then you don't have to worry about creating additional headquarter user accounts. Each server hosting Survey Solutions must have one server administrator account, and it is the first user account created on

the server. As this account is especially powerful, do protect the credentials for the administrator user.

To create additional headquarter user accounts the administrator should use the new menu 'Users', where a list of existing headquarter users is shown, and additional accounts can be created:

Another frequently requested feature was group operations on multiple assignments. In earlier versions the completed interviews could be approved or rejected only individually. Survey Solutions 4.1 allows the supervisor and the headquarter users select and approve (or reject) any number of the interviews they see on their screens without having to open them. Hence, the 'approve' and 'reject' buttons are now accessible from the dashboard in addition to the interview details page. This change should increase the throughput of the system.

Interviewers in large teams will notice faster communication. We have reduced the amount of information sent between the tablets, and used data compression algorithms to allow comfortable use of the software also for the users with limited communication channels. Lower traffic also results in lower charges for wireless communications.

At the headquarter level creating thousands of assignments in the batch mode got more straightforward with Survey Solutions automatically protecting the questionnaire from deletion while the assignments on it are being created.

Not only the software is being improved for supporting big surveys, but also for bigger questionnaires. Supervisors will experience the interview details opening faster in the new chapter-by-chapter view, and PDF-preview feature works better when generating previews of the large sized electronic questionnaires.

We continue improving the security of the data being collected. With earlier versions the interviewers could work on multiple devices, which is no longer allowed. Each interviewer must now work on the assigned device, which gets registered with the Survey Solutions server. The

switch to another device is a conscious action initiated by an interviewer. An interviewer can opt for it if the previous device is irretrievably lost. The system will automatically deny any attempts for synchronization from the lost device after the switch. The supervisor of such an interviewer can see that the device has been switched by the interviewer.

Users designing their own questionnaires using our online Questionnaire Designer will find that the navigation has improved. You can walk between questions and groups using the cursor keys, search with *Ctrl+F*, save with *Ctrl+S*, and use other shortcut keys for other common tasks. Simply press *Shift+?* for a quick reference on hot keys. Or use the context menu callable with a right-click of a mouse in the objects tree to insert a new question or group right where you need it. Survey Solutions 4.1 got smarter in understanding relationships between the questions, and the designers now can delete a group of interrelated questions without worrying about lost references as long as the questions are not referenced from outside of the group. And when you make any changes to the question properties, the color of the 'Save' button will tell you whether there is anything you need to save before you move on to the next question.

When you write complex validation or enabling conditions you will notice the parentheses get matched visually, which helps writing complex expressions.

Validation conditions are now supported in those few question types where they were previously unavailable: in geolocation, list and barcode questions. For example, if you have a barcode question named *isbn*, you can validate that it is of certain length, which must be 10 digits for book barcodes issued before January 1, 2007 and 13 digits for barcodes assigned after that date:

```
(isbn.Length==10) || (isbn.Length==13)
```

If you have a GPS location question named *gps*, you can validate if certain coordinates are within a certain range:

```
(gps.Latitude>49.86) && (gps.Latitude<50.11) &&
(gps.Longitude>36.12) && (gps.Longitude<36.46)
```

Notice the use of the individual coordinates in a dot-notation. Validations like these can prevent gross errors of location detection, which can happen due to atmospheric noise or other factors. When writing a validation like this, don't forget to supply an informative and easy to understand message to your interviewers, which will be displayed when the value does not satisfy the supplied validation condition.

If you are designing a questionnaire in Survey Solutions from an existing soft copy, you can try the convenience of inserting multiple items into the single choice questions at once. This is particularly convenient when the items are already typed in, and need to be transferred from

another document. Just make sure that each choice is on its own line and separated from the numeric code of option with dots, like so:

```
North...1
South...2
East....3
West....4
Center..5
```

If you have a list of all the options in a file like the rest is straightforward: after adding a single choice question, click on the 'show strings' link to display a window where you can paste these lines from your existing document.

We continue collecting feedback and suggestions from the users. If you have ideas and suggestions for improving the software, write to us: *support@mysurvey.solutions*