

**Askia Training**

Course 400

# **Askia Tools introductory training**



Participant's Coursebook



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# Introduction

## Format

This course comprises seven flexible modular sessions, which permit different learning pathways through the training course. It is primarily intended for research technicians or CAI (computer-assisted interviewing) scriptwriters who will be creating using askiatools to perform a number of maintenance and housekeeping tasks on data files such as importing, exporting and editing of data.

A further, optional module, 410 (in a separate document) covers how to edit data in askiatools, using askiascript commands. It requires knowledge of both script and tools.

Each session is intended to last no more than an hour, though it may take longer, if additional time is required to complete the practical work.

Each session follows the same format:

1. Introduction (by tutor) 2-3 minutes
2. Tutorial and demonstration 15-20 minutes
3. Summary (by tutor) 2 minutes
4. Practical exercises variable
5. Recap, feedback and questions

## Pre-requisites

This course assumes a working knowledge of askiadesign and ideally askiaalyse too. The knowledge required is covered respectively by these Askia training courses:

- |            |                |
|------------|----------------|
| Course 100 | Askia Design   |
| Course 200 | Askia Analysis |

## Module topics

- |             |                           |
|-------------|---------------------------|
| Session 401 | Importing a questionnaire |
| Session 402 | Importing data            |

- Session 403 Exporting data
- Session 404 Survey file maintenance
- Session 405 Merging data
- Session 406 Data management
- Session 407 Verifying and coding data

## **Further training**

- Module 410 Editing data for script users

Anyone wishing to use Tools to edit data should continue on to Session 410, which is provided as a standalone training module. Session 410 also requires participants to have completed the script training (Course 150 Askiascript), or be familiar with the content of that course.

## **Learning pathways**

After Session 401, which shows how to use askiatools, each subsequent session operates as a standalone module. Various learning pathways can therefore be followed, according to the topics of interest to the participant or group receiving the training.

## Session 401    **Importing a questionnaire**

### **Outline**

#### **Topics presented**

In this session, we will introduce you to:

- Open a QES file
- Create a QES by importing from a database
- Create a QES by importing from a file
- Transform imported questions into loops and multi-coded questions
- Record and play back macros

#### **Learning outcomes**

At the end of this session you will understand:

- Create questionnaires or data structures in Askia by importing them from other software tools
- Navigate and understand the working environment presented within AskiaTools
- Optimise an imported QES for use by Askia
- Automate questionnaire restructuring to save time on repetitive projects

# Material covered

## Starting askiatools



To start askiatools, double-click the icon on your desktop. Alternatively, you can open the start menu, click **all programs**, open the **askia** program group, and click **AskiaTools**.

## Importing from delimited ASCII

### Preparing a file prior to import

Before you import a questionnaire, it is best practice to check the file contents, and clean up any issues. This makes for a much cleaner import. During the import, askiatools examines all of the rows of the file, to analyse the structure and determine the data types. However, you should open your file in Excel™ or a text editor, to check the following issues:

- Check that you do not have your file delimiter (e.g. commas, if you are importing a comma-separated file) in any open text data. If you do, you should do one of the following:
  - remove them systematically from the file;
  - replace them with a different character throughout the file;
  - use a different delimiter character (e.g. a tab). You will need to check that this character is not present in the open text data.
- If you have any open text questions, it is a good idea to put in a dummy row at the start of the file, with values in the open text questions, so that askiatools will recognise them as open text. Otherwise, if there is no data in this question, askiatools will not recognise this question as open text.

### Performing the import

**Note:** Askia recommends that you import from a more structured format, such as triple-S wherever possible, because this will import more information, such as multi-coded questions.

When you import from delimited ASCII, you will be creating a new QES file to hold the questionnaire. Your ASCII file should have a separate row for each record, and variables should be separated by a special character (tab, semicolon, colon or comma). Note that you do not need a unique ID field for this type of import. When you import from ASCII, askiatools does not import any response labels in coded questions; you will need to add these to your QES in askiadesign, after the import.

*To import a questionnaire from a delimited ASCII file:*

1. In the **file** menu, select **import**, then **delimited ASCII...**



2. Click ... next to **ASCII file**, and select the file you want to import.
3. Click ... next to **Askia file**, and select a location and filename for the QES file you want to create.
4. Set the options as follows:

| Option                             | Description   |
|------------------------------------|---|
| Max number of responses            | <p>If a variable has this number of unique responses or fewer, it will be considered a closed question; if it has more responses than this, it will be considered an open text question.</p> <p>For example, if you enter 20 here, then any questions with 20 or fewer different responses will be treated as closed questions.</p>                       |
| Max number of discrete values      | <p>If a variable has this number of unique numeric responses or fewer, it will be considered a closed question; if it has more responses than this, it will be considered an open numeric question.</p> <p>For example, if you enter 10 here, then any questions with more than 10 different numeric responses will be considered to be open numeric.</p> |
| Question separator                 | Select the character that your ASCII file uses to separate the variables (tab, semicolon, colon or comma).  |
| Multiple response separator        | The character that will be used to separate responses in multiple-response questions (comma, colon, semicolon or tab). Select the character that is used in your ASCII file.  |
| Question captions on the first row | If the first row of your ASCII file contains question captions, you should select this option. Otherwise, ensure this option is not selected. This ensures that askiatools interprets the first row correctly.  |

5. Click **OK**. Askiatools imports the file and creates the new QES file.

## Checking the import

Once the import is complete, you will see the new QES structure in askiatools. You should review the structure to check that the questions have been imported as you would expect.

Depending on the format and contents of your file, there may be certain aspects of your questionnaire that askiatools cannot detect when it performs the import. You can remedy this after the import, using the utilities in askiatools, and by editing the new QES file in askiadesign. In some cases, you may need to repeat the import after adding some dummy rows to the file, in order to ensure that the questions are interpreted and imported as the correct types.

**Note:** By default, when you import an SPSS .sav file, all closed questions are imported as scaled responses. You should review them in askiadesign, and change the **scaled response** property if you want them to be standard closed

questions. You can change this default behaviour by editing a registry setting on your computer. For details, refer to the following Knowledge Base article:

<https://support.askia.com/hc/en-us/articles/203206412-How-to-import-a-SAV-file-without-scaled-responses-for-closed-questions->

If any multi-coded questions have been imported as single-coded, you can remedy this later in askiatools by using the **transform into multiple** utility. See *Transform into Multiple* on page 14 for details.

If any open numeric questions have been imported as closed questions, you will need to re-do the import after adding some dummy rows to the start of the file, to ensure that more than the appropriate number of discrete values (specified during the import, in the option **max number of discrete values**) are present in the data. This could be as simple as adding rows, each with a different values from 1 to 11 in the variable in question.

Since askiatools does not create response labels in coded questions when importing from ASCII, you will need to open the QES in askiadesign and add the labels there.



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**Warning:** If any of your variables are imported as the wrong type, you should not simply change the type in askiadesign, because this will affect the data. Instead, you can create a new variable based on the imported one.

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## Importing from database ADO or Excel™ file

When you import from a database ADO or Excel™ file, you will be creating a new QES file to hold the questionnaire. The procedure is very similar for importing from an Excel™ file, so we will cover both methods here.

**Note:** Askia recommends that you import from a more structured format, such as triple-S wherever possible, because this will import more information, such as multi-coded questions.

*To import a questionnaire from a database ADO or Excel™ file:*

1. In the **file** menu, select **import**, then **database (ADO)**...
2. In **ADO connection string**, type the connection string for the database you want to import. Note that you need to have ADO (ActiveX Data Objects) running on your computer to import using an ADO connection string.  
Alternatively:
  - to import from an Access™ MDB or ACCDB file, click ... and select the file you want to import;
  - to import from an Excel™ XLS or XLSX file, click ... and select the file you want to import.
3. In **table or query**, select
  - the database table you want to import (if importing from a database);
  - the Excel™ worksheet to import (if importing from Excel™).

4. Click ... next to **Askia file**, and select a location and filename for the QES file you want to create.
5. If the file is greater than 2GB in size, you must select **into inverted data format**.
6. Set the options as described below:

| Option                        | Description   |
|-------------------------------|---|
| Into inverted data format     | Select this if the file you are importing is greater than 2GB in size. Otherwise, ensure this is not selected.  |
| Max number of responses       | <p>If a variable has this number of unique responses or fewer, it will be considered a closed question; if it has more responses than this, it will be considered an open text question.</p> <p>For example, if you enter 20 here, then any questions with more than 20 different responses will be considered to be closed questions.</p>                |
| Max number of discrete values | <p>If a variable has this number of unique numeric responses or fewer, it will be considered a closed question; if it has more responses than this, it will be considered an open numeric question.</p> <p>For example, if you enter 10 here, then any questions with more than 10 different numeric responses will be considered to be open numeric.</p> |

7. Click **OK**. Askiatools imports the file or database and creates the new QES file.

After importing, you should carry out a check of the questionnaire structure, as described in *Checking the import* on page 9.

## Importing from triple-S

**Triple-S** is an industry standard for survey data and metadata exchange, used by many different software packages. It is therefore an excellent means of importing a questionnaire into QES format.

Triple-S data contains questions, and their associated data, but does not include questionnaire routing. Because question types are defined within triple-S, and triple-S supports multi-coded data, it means there is less work to do after the import:

- multi-coded questions will be defined properly;
- responses to closed questions (single and multi) will have their labels intact.

When you import from a triple-S file, you will be creating a new QES file to hold the questionnaire.

There are two versions of triple-S, classic and XML. The method for importing them is the same. You will need two triple-S files:

- a description file and
- a data file.

**Note:** askiatools assumes that both of your files have the same prefix. If they do not, you should rename them accordingly, or else your import will not complete.

*To import a questionnaire from a triple-S file:*

1. In the **file** menu, select **import**, then **triple-S**, then **Classic...**, or **XML...**, as appropriate to the files you are importing.
2. Click ... next to **triple-S source file**, then select the triple-S description file.
3. Click ... next to **Askia target file**, and select a location and filename for the QES file you want to create.
4. If the file is greater than 2GB in size, you must select **into inverted data format**.
5. Click **OK**. Askiatools imports the file and creates the new QES file.

## Importing from SPSS Dimensions

Importing from SPSS Dimensions format results in a tidy QES file, with loops. The two most common formats are MDD (with corresponding DDF file) and PKD. In the case of MDD, the Metadata is located in the MDD file and the Case data is in the DDF file.

**Note:** you can import from SPSS Dimensions if you have the Dimensions engine installed on your PC.

*To import a questionnaire from SPSS Dimensions:*

1. In the **file** menu, select **import**, then **SPSS (dimensions)...**
2. Next to **Dimensions connection string**, click .... The *data link properties* dialog appears.
3. Leave the **metadata type** set as the default setting (*data collection metadata document*).
4. Next to **metadata location**, click **browse...**, and select the .MDD file you want to use.
5. In **case data type**, select **data collection data file (read-write)**.
6. If the **case data location** file has not been automatically found, click **browse...** and select it.
7. Click **test connection**, to ensure that askiatools is able to successfully connect to the database. You should see a message confirming that the test connection succeeded; click **OK** to dismiss this message.
8. Click **OK** to confirm your settings and close the *data link properties* dialog.

9. If the Dimensions data file was created using an older version (earlier than 5.6), or you are aware that the Respondent ID field is something other than "RespondentSerial", specify the field name in **respondent ID**.
10. Next to **Askia target file**, click ... and specify the location and file name for the QES file you want to create.
11. Set the other options as follows:

| Option                                  | Description  |
|---|--|
| <b>Numeric DK values</b>                | If you are aware that a standard/ fixed numeric value for "DK" (Don't know) was used for <b>all</b> questions in the Dimensions file, specify the value here (and see <b>system DK caption</b> below).   |
| <b>System DK caption</b>                | If you are aware that a standard/ fixed numeric value for "DK" (Don't know) was used for <b>all</b> questions in the Dimensions file, specify the caption you wish to use for them here (and see <b>numeric DK values</b> above).  |
| <b>Group all DKs in system modality</b> | Select this option if you wish to group all of your "DK" codes/values into one answer/category in the resulting QES file.  |
| <b>Into inverted data format</b>        | If the resulting QES file will exceed the size limit for an Access database – 2GB – select the option to import data into inverted format.   |
| <b>Develop levels when depth &lt;:</b>  | <p>If you only wish to develop levels (loops) in the resulting imported QES file when their depth is below a specific amount, specify as follows:</p> <ul style="list-style-type: none"> <li>• If you leave this value set to 0, <i>all</i> levels/loops will be developed.</li> <li>• A value of "1" will ensure that <i>none</i> of the levels/ loops will be developed.</li> <li>• A value of "2" will ensure that only grids will be developed.</li> </ul> |

12. Click **OK** to perform the import. Once the import is finished, the structure (tree view) of the resulting QES file is displayed in askiatools.

## Importing from SPSS .sav

Importing from SPSS .sav doesn't import multi-coded questions (they are imported as a string of single-coded questions) or loops, so you will need to fix these after the import (see After the import on page 14).

*To import a questionnaire from an SPSS SAV file:*

1. In the **file** menu, select **import**, then **SPSS (.sav)....**
2. Select the .sav file you want to import, and click **open**.
3. Specify a location and file name for your QES file, and click **save**. Askiatools imports the file and creates the new QES file.

## After the import

Once your import is done, you will probably need to perform some “tidying up”, to ensure the questionnaire is well structured, especially if you did not use one of the more structured formats like triple-S or Dimensions.

### Transform into Multiple

If the import format you used does not support multi-coded variables, then you will need to remedy this by transforming the resulting single-coded variables into multiples.



**Warning:** If any of your multi-coded variables were imported as the wrong type, you should not simply change their type in askiadesign, because this will affect the data. Instead, you should use the **transform into multiple** utility in askiatools.

This utility creates new multi-coded variables, based on the questions you select from your imported QES. It leaves the individual (single-coded) variables in the QES, but de-selects the **visible in analyse** property for each, so that they do not appear during data analysis.

*To transform variables into multi-coded variables:*

1. In askiatools, open the QES file.
2. In the **tools** menu, select as appropriate to your data set:

| Option                                  | Description   |
|---|---|
| <b>transform into multiple (yes/no)</b> | <p>The first code found for each question to be merged will be treated as “yes” (or positive).</p> <p>This command is appropriate, for example, when ‘1’ in the data indicates a positive value and ‘2’ indicates a negative.</p> |
| <b>transform into multiple (no/yes)</b> | <p>The first code found for each question to be merged will be treated as “no” (or negative).</p> <p>This command is appropriate, for example, when ‘0’ in the data indicates a negative value and ‘1’ indicates a positive.</p>  |

3. In the *question selection* dialog, move the questions you want to transform to the right-hand list. To move a question, click it and then click the right-pointing arrow:



4. If you change your mind about a question, you can move it out of the right-hand list, by selecting it and clicking the left-pointing arrow:



5. Click **OK**.

## Transform into Loop

If you imported a questionnaire from a format that does not support loops, then you can remedy this in askiatools. This utility creates a new loop, but leaves the original variables in the QES. It de-selects the **visible in analyse** property for each, so they will not appear during data analysis.

*To transform variables into loops:*

1. In askiatools, open the QES file.
2. In the **tools** menu, select **transform into loop...**
3. In the *question selection* dialog, move the questions you want to transform to the right-hand list. To move a question, click it and then click the right-pointing arrow:



4. If you change your mind about a question, you can move it out of the right-hand list, by selecting it and clicking the left-pointing arrow:



5. Click **OK**.

## Adding chapters

After importing your survey, you may want to reorganise the survey in askiadesign, for example adding chapters and organising questions into them.



**Warning:** If any of your variables are imported as the wrong type, you should not simply change the type in askiadesign, because this will affect the data. Instead, you can create a new variable based on the imported one.

## Using Macros

If you carry out repeated questionnaire clean-up transformations – for example, you receive new versions of a SAV file on a regular basis and carry out the same transformations each time – you can record these in a **macro** and then run (or “play back”) the macro to save time.

Macros are easy to create. You simply record a set of actions, and can then play back the macro at a later date. You can only record the **transform into loop** and **transform into multiple** commands; other commands in askiatools are not recorded.

When you run a macro, the commands are applied to questions with the same names as the ones you transformed when you recorded the macro. Therefore, this feature works very well if you repeat the same activity on similar questionnaire files.

*To record a macro:*

1. In askiatools, open the QES file.
2. In the **tools** menu, select **macro**, then **record**.
3. Perform the **transform into multiple** and **transform into loop** commands that you want to record.
4. If you make a mistake, you can cancel the macro recording, by selecting **cancel** from the **macro** sub-menu. Your macro is not recorded, and you can skip the rest of this procedure.
5. When you have finished performing transform actions on your QES, in the **tools** menu select **macro**, then **stop**.
6. Specify a location and filename for the macro's XML file and click **save**. Your macro file is created.

*To run a macro:*

1. In askiatools, open the QES file on which you want to run the macro.
2. In the **tools** menu, select **macro**, then **run....**
3. Select the macro file you want to run.

## Recap

In this session, we have:

- Looked at several import methods in askiatools.
- Tidied up the questions and structure of the QES after doing an import.
- Recorded and run a macro.

## Practical exercises

### Exercise 1: Importing an unstructured file

In this exercise, you will import an SPSS .sav file. Your tutor will tell you which file to use.

*Please follow these steps:*

1. Start askiatools.
2. In the **file** menu, select **import**, then **SPSS (.sav)....**
3. Select the .sav file, and click **open**.
4. Specify a location and file name for your QES file, and click **save**.
5. Examine the QES structure in askiatools.




## Exercise 2: Cleaning up a file, and recording a macro

In this exercise, you will “clean up” a series of variables in a QES file, and save your actions as a macro, so that you can apply it to a future import.

*Please follow these steps:*

1. In askiatools, open the file *macro example transform 1.qes*.
2. In the **tools** menu, select **macro**, then **record**.

Note that if you make a mistake while recording your macro, you can cancel the recording by selecting **cancel** from the **macro** sub-menu. If you do that, your macro is not recorded, and you start the macro recording again.

3. In the **tools** menu, select **transform into multiple (no/yes)**.
4. In the *question selection* dialog, move the *REASONS* questions (*REASONS\_1*, *REASONS\_2* etc.) into the right-hand list by selecting them and clicking the right arrow:  

5. Click **OK**. You will see a new multi-coded question, *REASONS*, appear in the QES structure.
6. In the **tools** menu, select **macro**, then **stop**.
7. Enter a name for your macro and click **save**.

## Exercise 3: “Playing back” your macro to clean up another file

Finally, you will apply the clean-up operation you just recorded to another file.

1. Open the file *macro example transform 2.qes*.
2. In the **tools** menu, select **macro**, then **run**.
3. Select the macro file you saved in the previous exercise, and click **open**.
4. You will see a new multi-coded question, *REASONS*, appear in the QES structure.



## Session 402    **Importing data**

### **Outline**

#### **Topics**

In this session, you will learn how to:

- Import interview data from Askia DAT files
- Import data from fixed-length ASCII files
- Import Askia XML interview data from a CAPI interviewing device

#### **Learning outcomes**

At the end of this session, you will be able to:

- Populate a questionnaire you have created in Askia with data collected in another data collection tool
- Recover interview data saved in data files, instead of the QES during fieldwork
- Recover interview data manually from a CAPI interviewing device

# Material covered

## Importing interviews from a directory

During fieldwork, sometimes it is not possible for the data to be saved in the QES – for example, if the QES file is open in another application. In this situation, the data is stored in temporary DAT files, with one file per interview. You can determine this has happened in two ways:

- Askia CCA records a log warning to indicate this has happened;
- The number of completed interviews shown in Supervisor will be greater than the number of records in the QES, because some of the interviews will be stored in the external DAT files.

AskiaTools allows you to easily import these interviews into the QES. You can do by omitting any duplicate records, or importing them all.

*To import interviews in DAT files:*

1. In askiatools, open the QES file into which you want to import the interviews.
2. In the **file** menu, select **import data**, then **interviews from directory**, then select **without duplicates** or **all**....
3. Select the directory containing the interviews, and click **OK**. The interviews are imported into the QES.

## Importing fixed-length ASCII

Note that before you import fixed-length ASCII data, you need to define the QES's **data map**. See *Defining the data map* on page 24 for details.

*To import data in fixed-length ASCII format:*

1. Open the QES file.
2. Ensure you have defined the data map; see *Defining the data map* on page 24 for details.
3. In the **file** menu, select **import data**, then **fixed length ASCII using**, then **simplified map**....
4. Select the data file you want to import, and click **OK**.

## Importing Askia XML interviews

### De-duplicating data

## Recap

In this session, we have seen how to:

- Import interviews from DAT files.
- Import fixed-length ASCII files.
- Manually import Askia XML interview files from iOS and Android devices.

## Practical exercise

### Importing fixed-length data

In this exercise, you will import data into a new QES file.

*Please follow these steps:*

1. In askiatools, open the file *import\_fixed\_length\_ASCII.qes*.
2. In the **file** menu, select **import data**, then **fixed length ASCII using**, then **simplified map....**
3. You are asked if you want to define the map: answer **yes**.
4. Right-click and select **generate**.
5. Click **OK** to finish defining the data map.
6. In the **file** menu, again select **import data**, then **fixed length ASCII using**, then **simplified map....**
7. Select the data file *import\_fixed\_length\_ASCII a.txt* and click **open**.
8. Note how many records were imported. If askiaanalyse is available on your computer, open the QES file there and note how many records are present in the file.
9. Now we will import a second batch of records. In the **file** menu, select **import data**, then **fixed length ASCII using**, then **simplified map....**
10. Select the file *import\_fixed\_length\_ASCII a.txt* and click **open**.
11. Note how many records were imported. If askiaanalyse is available on your computer, open the QES file there and note how many records are present in the file.



## Session 403    **Exporting data**

### Outline

#### Topics

In this session, we will introduce you to:

- Export to triple-S,
- Export to fixed-length ASCII or Delimited ASCII
- Export to SPSS Dimensions
- Export to SPSS SAV
- Export to XML
- (If required) Export to Card Column Punch (80-column card image) format
- Export in Askia DAT format to a directory of files
- Export interviews as a Microsoft Word questionnaire, including the data

#### Learning outcomes

After this session, you will be able to:

- Export interview data from your QES into any of several file formats
- Export interviews to Word for data checking
- Filter the data you export, according to the language used in the data file

# Material covered

## Defining the data map

If you want to import or export certain data formats (for example, fixed-length ASCII or triple-S), then you need to define a **data map**. In the case of an export, this tells askiatools where to find or place each variable in the imported or exported data file.

Askiatools provides two ways to define your data map:

- Simplified definition
- Detailed definition

In this course, we will cover simplified data map definition.

Askiatools can normally create the data map for you, by interpreting the structure of the QES. In some situations, you will want to make adjustments to this. The following procedure guides you through automatically creating the map, and also making adjustments where necessary.

*To define a QES file's data map:*

1. Open the QES file.
2. In the **file** menu, select **data map definition**, then **simplified....**
3. To have askiatools automatically create the map, right-click and select **generate**.
4. In the data map generation window, there are several columns, which indicate the following about the data map:

| Column        | Description  |
|---------------|--|
| Exported      | If this is selected, the variable in question will be exported during an export operation.                         |
| Start         | Defines the column where the variable will "start" in any export or import operations.                             |
| Length        | Defines the "length" of the variable (i.e. the number of character-columns used by the variable in the data file). |
| Binary        | If selected, the variable's data will be imported or exported in binary format.                                    |
| Spacing       | Indicates any free spaces left between variables in the data.  |
| Responses     | The number of response items the variable has.   |
| Max responses | The maximum number of responses which could be selected in this variable during fieldwork.                         |
| Occurrences   | The number of times a loop's sub-question was iterated during fieldwork.   |



5. Usually, you can accept the default options. In this situation, skip ahead to step 7. If you want to change some of the settings, right-click and select **options**. The most commonly-used options are described below. Once you have set the options to your liking, click **OK**.

| Option                                | Description  |
|---------------------------------------|--|
| Export ID                             | If this option is selected, the respondent ID field will be exported at the start of each record. In <b>size</b> , specify the width of this field.  |
| Binary export for single by default   | If selected, single-coded closed questions will be imported/exported in binary (each column will contain 1 if the answer was selected, 0 if not). One column will be generated for each response (e.g. if the variable has two responses, the length will be 2). |
| Binary export for multiple by default | If selected, multi-coded closed questions will be imported/exported in binary (each column will contain 1 if the answer was selected, 0 if not). One column will be generated for each response (e.g. if the variable has two responses, the length will be 2).  |
| Numerics: default size                | Determines the default length used for numeric questions when the map is generated.  |
| Export open-ended                     | If selected, open-ended questions will be exported.  |
| Opens: default size                   | Determines the default length used for open questions when the map is generated.   |

6. If you made any changes to the options, you will need to re-generate the data map. To do so, right-click and select **generate**. Otherwise, simply proceed to step 7.
7. Check the contents of the data map, and adjust data positions and lengths if necessary.
8. Ensure that all the variables you want to import or export have a check/tick in the **exported** column.
9. Click **OK**.

**Note:** if a question has been added to the questionnaire since the data map was created, you can automatically adjust the map from that point onwards. Right-click the question that has been added, and select **adjust from here**.

## Checking the data map

You can have askiatools check the data map for possible overlaps of data (where a question's start position falls "inside" another question's allocated data positions). Note that this verifies the structure of the map, not the data itself. To do so, when defining the data map, right-click and select **verify**. Askiatools will inform you of any problems in the data map structure.

## Exporting triple-S

When you export triple-S data, you need to first define a **data map**. See *Defining the data map* on page 24 for details.

By default, all questions are included in the export, but you can export specific questions by selecting a **selection of questions**.

*To export data in triple-S format:*

1. In askiatools, open the QES file.
2. In the **file** menu, select **export**, then **triple S....** If you have not defined a data map, you will be taken to the data map definition screen. See *Defining the data map* on page 24 for details. You will then need to begin this export procedure again.
3. Next to **triple-S file**, click ..., specify a location and filename for the data file you want to create, and click **save**.
4. Select the triple-S format you want to export to: **classic triple-S**, or **XML triple-S 2.0**.
5. Select which data is exported, by setting the following options:

| Option                  | Description  |
|-------------------------|--|
| Export completes only   | Select this if you don't want to export incomplete interviews.   |
| Interview started after | You can select a date here, to export only the interviews that began after this date.  |
| Additional filter       | Here, you can specify a filter, written in askiascript, if you want to export only a subset of the data. Askiascript is beyond the scope of the course; please refer to the askiadesign Assistant for details. |

6. Click **OK** to begin the export.

## Interviews to directory

You can use askiatools to export interviews to DAT format.

*To export interview data to a directory in DAT format:*

1. In askiatools, open the QES file.
2. In the **file** menu, select **export**, then **interviews to directory....**
3. Select the directory into which you want to export the interview files, and click **OK**.

## Fixed-length ASCII

When you export fixed-length ASCII data, you need to first define a **data map**. See *Defining the data map* on page 24 for details..

*To export data in fixed-length ASCII format:*

1. In askiatools, open the QES file.
2. In the **file** menu, select **export**, then **fixed-length ASCII using**, then **simplified map....** If you have not defined a data map, you will be taken to the data map definition screen. See *Defining the data map* on page 24 for details. You will then need to begin this export procedure again.
3. Specify a location and filename for the data file you want to create, and click **save**.

## Exporting to delimited ASCII

You can export data to a delimited ASCII file. This is a useful format for exporting open-ended interview data. It is therefore a useful format when exporting data to be coded.

*To export data in delimited ASCII format:*

1. In askiatools, open the QES file.
2. In the **file** menu, select **export**, then **delimited ASCII....**
3. Next to **ASCII file**, click ..., specify a location and filename for the data file you want to create, and click **save**.
4. If you are exporting a file of open-ends to be coded, you should select the option **all open-ended**.
5. In **question separator**, specify the character to be used to separate questions.
6. In **multiple responses separator**, specify the character to be used to separate responses in multi-coded questions.
7. Select which data is exported, by setting the following options:

| Option                  | Description  |
|-------------------------|--|
| Export completes only   | Select this if you don't want to export incomplete interviews.   |
| Interview started after | You can select a date here, to export only the interviews that began after this date.  |
| Additional filter       | Here, you can specify a filter, written in askiascript, if you want to export only a subset of the data. Askiascript is beyond the scope of the course; please refer to the askiadesign Assistant for details. |

8. Click **OK** to begin the export.

## Dimensions and SAV

**Note:** you can import from SPSS Dimensions if you have the Dimensions engine installed on your PC.

**Note:** when exporting to Dimensions, askiatools can only export in MDD format.

*To export to SPSS Dimensions:*

1. In askiatools, open the QES you want to export.
2. In the **file** menu, select **export**, then **SPSS Dimensions....**
3. Specify a location and filename for the data file you want to create, and click **save**.
4. The *data link properties* dialog asks you to confirm your choices of file locations, file names and file types. Click **OK** to begin the export.

*To export to SPSS SAV format:*

1. In askiatools, open the QES you want to export.
2. In the **file** menu, select **export**, then **SPSS sav format....**
3. Next to **SAV file**, click ..., specify a location and filename for the data file you want to create, and click **save**.
4. Select which data is exported, by setting the following options:

| Option                  | Description  |
|-------------------------|--|
| Export completes only   | Select this if you don't want to export incomplete interviews.   |
| Interview started after | You can select a date here, to export only the interviews that began after this date.  |
| Additional filter       | Here, you can specify a filter, written in askiascript, if you want to export only a subset of the data. Askiascript is beyond the scope of the course; please refer to the askiadesign Assistant for details. |

5. Click **OK** to begin the export.

## Exporting the questionnaire in XML format

Askiatools allows you to export the questionnaire in XML format. This is especially useful if you want to restructure other QES files based on this one. For details, see *Rebuilding the questionnaire based on the contents of a file* on page 39.

*To export to XML format:*

1. In askiatools, open the QES you want to export.
2. In the **file** menu, select **export**, then **XML questionnaire....**
3. Specify a location and filename for the data file you want to create, and click **save**.

## Card Column Punch

For reasons of compatibility with older third-party software, you may sometimes need to export to card column punch format. This is essentially the same as exporting to fixed-length ASCII. However, you need set up a detailed data map when exporting to this format, which is beyond the scope of this course; please see the Askia Field Assistant for details.

*To export data in card column punch format:*

1. In askiatools, open the QES you want to export.
2. In the **file** menu, select **export**, then **fixed-length ASCII using**, then **detailed map....** If you have not defined a data map, you will be taken to the data map definition screen. Note that defining a detailed data map is beyond the scope of this course; please see the Askia Field Assistant for details.
3. Specify a location and filename for the data file you want to create, and click **save**.

## Exporting interviews to Word™

You can export questionnaires in Rich Text Format, populated with interview data (one questionnaire per record). This is useful for data checking, or to perform follow-up face-to-face interviews where you want the interviewer to have the respondent's previous answers.

This export produces a Rich Text Format file, suitable for opening in Microsoft Word™, and other leading word processing programs.

*To export data in Rich Text Format:*

1. Open the QES file.
2. In the **file** menu, select **export**, then **interviews to Word....**
3. Next to **RTF file**, click ..., specify a location and filename for the data file you want to create, and click **save**.
4. Set the options as follows:

### Option

Create one file per interview

Export a selection of questions

### Description

Select this if you want a separate RTF file for each interview; otherwise, the interviews will be appended to the same file.

Select this if you want to export only certain questions from the interview. In

**Option**

**Description**

the adjacent list, select the questions you want to export.

5. Select which data is exported, by setting the following options:

**Option**

**Description**

Export completes only

Select this if you don't want to export incomplete interviews.

Interview started after

You can select a date here, to export only the interviews that began after this date.

Additional filter

Here, you can specify a filter, written in askiascript, if you want to export only a subset of the data. Askiascript is beyond the scope of the course; please refer to the askiadesign Assistant for details.

6. Click **OK** to begin the export.

## Setting the language that is exported

For multi-lingual questionnaires, you can choose which version is exported from askiatools (in other words, which language is exported).

*To set the language to be exported:*

1. Open the QES file.
2. In the **edit** menu, select **current language ....** The *languages* dialog appears.
3. Select the language you want to export, and click **OK**. Any exports from this QES will now be done in the language you selected.

## Recap

In this session, you have learned how to:

- Export data in variety of formats, including triple-S, fixed-length ASCII, delimited ASCII, Dimensions and SAV
- Export interviews to a directory
- Export interviews to Word™
- Set which language is exported

## Practical exercises

In the following exercises, you will export data into multiple formats.

### Exercise 1: Exporting data in triple-S format

*Please follow these steps:*

1. In askiatools, open the file *export\_example.qes*.
2. In the **file** menu, select **export data**, then **triple-S....**
3. You are prompted to set up a column description, so click **OK**.
4. Right-click in the data map grid and select **generate**. Then click **OK** to set up the map.
5. In the **file** menu, again select **export data**, then **triple-S....**
6. Next to **target**, click ..., specify a location and filename for the data file you want to create, and click **save**.
7. Click **OK** to carry out the export.
8. Open the resulting file in a text editor or XML editor, if one is available on your computer.

### Exercise 2: Exporting data in SPSS SAV format

*Please follow these steps:*

1. In askiatools, open the file *export\_example.qes*.
2. In the **file** menu, select **export**, then **SPSS sav format....**
3. Next to **SAV file**, click ..., specify a location and filename for the data file, and click **save**.
4. For this export, we'll export only completed interviews. Select **export completes only**.
5. Click **OK** to begin the export.

### Exercise 3: Exporting data to delimited ASCII

*Please follow these steps:*

1. In askiatools, open the file *export\_example.qes*.
2. In the **file** menu, select **export**, then **delimited ASCII....**
3. Next to **ASCII file**, click ..., specify a location and filename for the data file you want to create, and click **save**.
4. In **question separator**, select **{TAB}**.
5. In **multiple responses separator**, select comma.

6. If you are familiar with askiascript, write an additional filter for this export (otherwise, skip to step 7). Click ... and enter your filter. For example, it could be `??i1. Gender?? Has (2)` to include only females in your export, if your QES has that variable. Use the **compile** button to check the validity of your filter's syntax before you apply it.
7. Click **OK** to begin the export.
8. Open the file in Excel™, if it is available, or in a text editor.

## Exercise 4: Exporting interviews to Word

*Please follow these steps:*

1. In askiatools, open the file *example\_export\_interviews\_to\_word.qes*.
2. In the **file** menu, select **export**, then **interviews to Word...**
3. Next to **RTF file**, click ..., specify a location and filename for the data file you want to create, and click **save**.
4. In **export questions**, select **a selection of questions**.
5. Click **OK** to begin the export. You will be prompted to select the questions you want to export. Choose which questions you want to export, and ensure they are in the right-hand list; remove any questions from the right-hand list by selecting them and clicking the left-pointing arrow:



6. Click **OK**. The export is carried out.
7. If Word, or another Word processor is available, open the RTF file.



## Session 404    **Survey file maintenance**

### Outline

#### Topics

In this session, we will focus on

- Verifying the data structure
- The *delete interview* set of commands
- Compacting and repairing the data
- Reducing the space used by multi-coded questions
- Reordering or deleting questions in your QES

#### Learning outcomes

At the end of this session you will be able to:

- Perform a variety of checks and repairs on your QES
- Restructure your questionnaire based on the structure of an external file
- Optimize QES files by removing redundant space

## Material covered

### Verifying the data structure after adding a new question

In some circumstances, QES files can become corrupted if you have run edits or made changes to them. You should **verify** the data structure whenever you add a question after fieldwork is complete.

Each question in the database contains two fields: one for the timing, one for the data. If you add a question after fieldwork is complete, only one field is created, so you need to verify the data to correct this. For example, you might add a new single-coded question to store coded data based on a numeric age question.

Note that:

- during fieldwork you don't need to verify the data when you add a question, as data is automatically verified in this situation;
- if you generate random data, the data is also verified automatically at this point.

*To verify the QES data structure:*

1. Open the QES file.
2. In the **edit** menu, select **verify data structure....**

### Deleting all interviews

If you want to clear all interview data from a QES, you can do so easily in askiatools.



---

**Warning:** This action cannot be undone, so always ensure you have a backup of your data before running this command.

---

*To delete all interviews from the QES:*

1. Open the QES file.
2. In the **edit** menu, select **delete all interviews**.
3. You are asked to confirm the deletion. Note that this command cannot be undone, so always ensure you have a backup of your data before deleting any interviews. If you are sure you want to delete the interviews, select **yes**.

### Deleting incomplete interviews

You can easily delete any incomplete interviews from your QES with askiatools. This is useful if you are not interested in the incomplete interviews, as it can make the data set easier to work with.



**Warning:** This action cannot be undone, so always ensure you have a backup of your data before running this command.

*To delete incomplete interviews from the QES:*

1. Open the QES file.
2. In the **edit** menu, select **delete uncompleted interviews**.
3. You are asked to confirm the deletion. Note that this command cannot be undone, so always ensure you have a backup of your data before deleting any interviews. If you are sure you want to delete the interviews, select **yes**.

## Deleting a selection of interviews

You can delete selected interview data from the QES. This might be:

- incomplete interviews;
- completed interviews;
- interviews that took place in a specific date range;
- interviews based on a custom askiascript filter, or
- a combination of these (e.g. incomplete interviews that took place between October 1<sup>st</sup> and October 8<sup>th</sup>, where response 5 was selected at variable Q3).



**Warning:** This action cannot be undone, so always ensure you have a backup of your data before running this command.

*To delete a selection of interviews from the QES:*

1. Open the QES file.
2. In the **edit** menu, select **delete a selection of interviews....**
3. Select the options as follows:

| Option                              | Description  |
|-------------------------------------|--|
| Incompletes                         | Select this if you want to delete incomplete interviews.   |
| Completes                           | Select this if you want to delete completed interviews.  |
| Interview started after (including) | If you select this, then specify a date, only the interviews that began on or after this date will be deleted. |
| Interview started before            | If you select this, then specify a date, only the interviews that began before (but not on) this date          |

| Option            | Description  |
|-------------------|--|
| (excluding)       | will be deleted.   |
| Additional filter | Here, you can specify a filter, written in askiascript, if you want to delete only a subset of the data. Askiascript is beyond the scope of the course; please refer to the askiadesign Assistant for details. |

- Click **OK** to delete the interviews. If any interviews met your criteria, askiatools will prompt you to confirm the deletion (the number of interviews that will be deleted is shown in the confirmation dialog). Note that this command cannot be undone, so always ensure you have a backup of your data before deleting any interviews. If you are sure you want to delete the interviews, click **yes**.

## Marking a selection of interviews as complete or incomplete

You can mark a selection of interviews as either complete or incomplete. This can be interviews that took place within a certain date range, or according to a custom filter. The procedure is the same for marking both complete and incomplete interviews.

*To mark a selection of interviews as complete or incomplete:*

- Open the QES file.
- In the **edit** menu, select **mark a selection of interviews**, then **complete...** or **incomplete...**, as appropriate.
- Select the options as follows:

| Option                               | Description  |
|--------------------------------------|--|
| Interview started after (including)  | If you select this, then specify a date, only the interviews that began on or after this date will be marked as complete/incomplete.         |
| Interview started before (excluding) | If you select this, then specify a date, only the interviews that began before (but not on) this date will be marked as complete/incomplete. |
| Additional filter                    | Here, you can specify a filter, written in askiascript, if you want to mark as complete/incomplete only a subset of the data.                |

For example:

```
??Unique-ID??=105 or 106 or 107
```

A long list of IDs can be pasted in from Excel.

You can also specify a range of numbers:

```
??Unique-ID?? > 104 AND ??Unique-ID?? < 200
```

Askiascript is beyond the scope of the course; please

**Option****Description**

refer to the askiadesign Assistant for details.

4. Click **OK** to mark the interviews. If any interviews met your criteria, askiatools will prompt you to confirm your choice (the number of interviews that will be affected is shown in the confirmation dialog). Note that this command cannot be undone, so be sure you want to make this change running this command. If you are sure you want to mark the interviews, click **yes**.

## Using “mark and set value” to record completion status

You can mark a selection of interviews as either complete or incomplete and set a value in a specific variable. This can be useful for recording custom completion statuses; for example, for marking interviews that are out of quota, or where the respondent raced through the interview.

*To mark and set value:*

1. This procedure permanently changes the data in your QES. As such, you should take a back-up of your QES file. In the event that you get unexpected results, you will then still have your original data.
2. Open the QES file.
3. In the **edit** menu, select **mark a selection of interviews**, then **complete...** or **incomplete...**, as appropriate.
4. Select the options as follows:

**Option****Description**

Additional filter

Here, you can specify a filter, written in askiascript, if you want to mark as complete/incomplete only a subset of the data.

For example:

```
length_of_interview<11
```

Askiascript is beyond the scope of the course; please refer to the askiadesign Assistant for details.

Set a value to a question

Allows you to set a value in a specific question, for the interviews identified by the filter.

Question

Specifies the question whose value you will be changing. For example, you might select *completion\_status*.

Value

Specifies the value you will be storing in the question selected above, for all interviews identified by the filter. For example: 99.

5. Click **OK** to mark the interviews. If any interviews met your criteria, askiatools will prompt you to confirm your choice (the number of interviews that will be affected is shown in the confirmation dialog). Note that this command cannot be undone, so be sure you want to make this change running this command. If you are sure you want to mark the interviews, click **yes**.

## Removing unused space from the QES

If you delete a lot of interviews from your QES, you can end up with a lot of empty space within the file. In this situation, analysis can sometimes get noticeably slow. You can improve the performance by compacting and repairing the file. This removes any unused space, making the file more efficient to work with.

*To remove unused space from the QES:*

1. Open the QES file.
2. In the **edit** menu, select **compact and repair database**.

## Reducing multiple responses to fit

After fieldwork is complete, multi-coded questions can cause unused space in the QES, if some of the responses were never selected by any respondents. If this is a large number of responses, it can be worth removing the unused space to improve the QES performance.

For example, if a multi-coded question has 50 responses, but only 10 are ever selected, then 40 columns are wasted per record.

Askiatools can set the maximum number of responses in multi-coded questions based on the actual values in the data, and reduce the file size accordingly.



---

**Warning:** This action should only be done after fieldwork is complete; you do not want to remove responses from the QES while they can potentially be selected by respondents.

---

*To reduce the space taken by multiple responses:*

1. Open the QES file.
2. In the **tools** menu, select **reduce multiple responses to fit**.

## Reordering questions based on a matching file

You can change the order of the questions in a QES file, based on the contents of an external text file. If you need to make a few changes, you could use askiadesign. However, askiatools allows you to change the order of many questions in one quick operation, whether or not you have a license for askiadesign. This feature is also very useful if you often perform the same question order change on similar QES files.

In order to perform this operation, you need to create a text file containing the shortcuts of the questions and chapters in the desired order, as follows:

- Each line should contain two shortcuts, separated by a tab.
- If a variable is to be indented inside another, the parent variable should be first, then a tab character, then the variable to be indented.
- If the variable is not being indented, simply include its shortcut on the line twice, separated by a tab.

- For example:

|              |        |
|--------------|--------|
| Demographics | Age    |
| Demographics | Gender |
| Q1           | Q1     |
| Q2           | Q2     |

*To re-order to the QES, based on the contents of an external file:*

1. Ensure you have prepared your text file, as described above.
2. Open the QES file.
3. In the **tools** menu, select **reorder questions with matching file....**
4. Select the external file and click **open**.

## Deleting a list of questions from the QES

You can delete a list of questions from the QES, based on the contents of an external XML file. This feature lets you remove questions even if you do not have a license for askiadesign. This feature is also very useful if you often remove similar lists of questions (e.g. you have similar QES file, such as different instalments of a diary study).

The structure of the file should be as follows (in the following example, variables q1 and q8 are to be deleted):

```
<?xml version="1.0" encoding="Unicode" ?>
<SuppressedVariables>
  <SuppressedVariable>q1</SuppressedVariable>
  <SuppressedVariable>q8</SuppressedVariable>
</SuppressedVariables>
```

*To delete a list of questions from the QES:*

1. Ensure you have prepared your XML file, as described above.
2. Open the QES file.
3. In the **tools** menu, select **delete questions with a matching file....**
4. Select the external file and click **open**.

## Rebuilding the questionnaire based on the contents of a file

You can change the structure of the QES, based on the contents of an external XML file. This feature lets you restructure the QES even if you do not have a license for askiadesign. This feature is also very useful if you often restructure similar projects (e.g. you have similar QES file, such as different instalments of a diary study).

The QES is restricted as follows:

- When a chapters exists in the XML file, but not the QES, it is added to the QES;
- When a question exists in the XML, but not the QES, a chapter is created in the QES with the same shortcut as the question;
- When a question exists in the QES, but not the XML, it remains in the QES, located just after the first known preceding question in the source.

You can export a questionnaire as XML in order to apply its structure to another QES. See *Exporting the questionnaire in XML format* on page 28 for details on exporting as XML.

*To restructure the QES based on an external XML file:*

1. Ensure you have prepared your XML file, as described above.
2. Open the QES file.
3. In the **tools** menu, select **rebuild tree structure with matching file....**
4. Select the external file and click **open**.

## Recap

In this session, you have learned how to:

- Delete interviews from the QES
- Mark interviews as complete or incomplete
- Remove unused space from the QES
- Reorder or delete questions based on the contents of a file



## Practical exercises

Please do the following exercises.

### Exercise 1: Verifying the data structure after the questionnaire has changed

*Please follow these steps:*

1. Take the file *verify.qes*, and make a copy of it, adding “\_1” to the name (so it becomes *verify\_1.qes*).
2. Open the new QES in askiadesign, and add a new question of your choice. Save your changes, and close askiadesign.
3. Open the new QES in askiatools.
4. In the **edit** menu, select **verify data structure....**

### Exercise 2: Marking interviews as incomplete

*Please follow these steps:*

1. Open *mark\_incomplete.qes* in askiatools.
2. In the **edit** menu, select **mark a selection of interviews**, then **incomplete....**
3. Next to **additional filter**, click ....
4. Enter a condition that references a range of interviews (e.g. records 50-70).
5. Click **OK**. When you are asked to confirm your action, answer **yes**.

### Exercise 3: Deleting specific interviews from the QES

*Please follow these steps:*

1. Open the file *delete\_selection.qes* in askiatools.
2. In the **edit** menu, select **delete a selection of interviews....**
3. Next to **additional filter**, click ....
4. Enter a filter that references a range of interviews (e.g. interviews 1-5).
5. Click **OK**. When you are asked to confirm your action, answer **yes**.
6. Open the QES provided by your tutor.
7. In the **tools** menu, select **reduce multiple responses to fit**.
8. In the **edit** menu, select **compact and repair database**.



## Session 405   **Merging data**

### Outline

#### Topics

In this session, you will learn how about:

- Merge interviews
- Merge questionnaires
- Consolidate using ID
- Overwrite data

#### Learning outcomes

At the end of this session, you will be able to:

- Merge and consolidate records in your QES files
- Combine records from different QES files in various ways
- Merge data across levels
- Match and combine records using a unique identifier
- De-duplicate QES files
- Perform update runs to replace data that need to change

## Material covered

### Checking whether two QES files have identical structures

AskiaTools can check whether two QES files have identical structures (this is known as “superposable”). This is useful when merging QES files, as identical files can be more easily merged. If the files are not identical, AskiaTools produces a text file containing a description of any differences between the files.


*To check whether two QES files have identical structures:*

1. Open the first QES file.
2. In the **merge** menu, select **compare files....**
3. Select the second QES file, and click **open**.
4. If the files are not identical, you will be prompted to save the report file, in text format. Specify a name and location for the text file, and click **save**. The report is generated, and opens automatically in an external text editor program.

### Merging interviews from one QES into another

You can use AskiaTools to merge interviews from one QES into another. This is easier to do if the QES files are identical in structure. To check whether they are, you can run the **compare files** command. See Checking whether two QES files have identical structures on page 44 for details.

*To merge interviews:*

1. Open the target QES file (the file into which you want to merge the interviews).
2. In the **merge** menu, select **interviews....**
3. Next to **askia file**, click **open**:  

4. Select the source QES file (the file containing the interviews you want to merge) and click **open**.
5. If the two QES files have the same structure (See Checking whether two QES files have identical structures on page 44), select **assume questionnaires are superposable**. Otherwise, you will need to select **using shortcuts and entry codes** or **using internal question and response ids...** as the basis for matching questions.
6. Click **OK** to perform the merge.

### Merging two questionnaires

You can use AskiaTools to merge interviews from one QES into another.

- Any questions from the second (source) QES are appended to the end of the first (target) QES.
- All of the interviews from the source QES are copied into the target QES, but note that you will end up with separate records from each QES, even if one record in each QES is for the same respondent.

*To merge two questionnaires:*


1. Open the target QES file (the file into which you want to merge the questions).
2. In the **merge** menu, select **questionnaires....**
3. Select the source QES file (the file containing the questions you want to merge) and click **open**.

## Merging two questionnaires matched by ID

Askiatools allows you to merge two questionnaires, and match the records based on the values found in an ID question.

- Any questions from the second (source) QES are appended to the end of the first (target) QES.
- All of the interviews from the source QES are copied into the target QES, and you will end up with one record for each respondent.
- Respondent records are matched by the ID question that you nominate, so if two records relate to the same respondent, they will be amalgamated.
- This procedure also checks for duplicate records.

*To merge two questionnaires using an ID variable:*

1. Open the target QES file (the file into which you want to merge the questions).
2. In the **merge** menu, select **questionnaires using ID....**
3. Next to **askia file**, click **open**:  

4. Select the source QES file (the file containing the interviews you want to merge) and click **open**.
5. In **respondent ID in target**, select the variable containing respondent IDs in the target QES.
6. In **respondent ID in source**, select the variable containing respondent IDs in the source QES.
7. Click **OK** to perform the merge.


## Merging two questionnaires to create one with two levels

Askiatools allows you to merge one QES into a second level of another, matching the records based on the values found in an ID question.

- This utility creates a new loop in the target QES, containing data from the source QES.

- Any questions from the second (source) QES are appended to the first (target) QES.
- All of the interviews from the source QES are copied into the target QES, and you will end up with one record for each respondent.
- Respondent records are matched by the ID question that you nominate, so if two records relate to the same respondent, they will be amalgamated.

*To merge one questionnaire into a new level of a second questionnaire using an ID variable:*

1. Open the target QES file (the file into which you want to merge the questions).
2. In the **merge** menu, select **questionnaire in new level using ID...**
3. Next to **askia file**, click **open**:  

4. Select the source QES file (the file containing the interviews you want to merge) and click **open**.
5. In **respondent ID in target**, select the variable containing respondent IDs in the target QES.
6. In **respondent ID in source**, select the variable containing respondent IDs in the source QES.
7. Click **OK** to perform the merge.

## Consolidating duplicated data records

Askia tools allows you consolidate duplicate data records within a QES, based on the value in an ID variable. This command is useful if you have merged two QES files which had different sets of questions, but the same set of respondents (for example, questions 1 to 20 in the first QES and questions 21-40 in the second QES).

- Respondent records are matched by the ID variable that you nominate, so if there are two records relating to the same respondent, they will be amalgamated.
- Using this command after doing a **merge questionnaires** is roughly equivalent to using the **merge questionnaires using ID** command.

*To consolidate duplicate records within a QES:*

1. Open the QES file.
2. In the **merge** menu, select **consolidate using ID...**
3. Select the question that you want to use as the ID variable. It will be used to match the records. Click **OK**. Askia tools performs the consolidation, and informs you as to how many interviews it has consolidated.

## Overwriting data using an ID variable and shortcuts

Askiatools allows you to overwrite data in one QES with data from another, using an ID variable to identify records and question shortcuts to identify the questions. It is useful when:

- you re-ask one or more questions in a study, and you want to replace the data for these questions with data from a second QES, which contains the re-asked question data;
- you want to re-import data after external coding has taken place.

You can overwrite data in a sub-set of the questions; you do not need to overwrite all the question data if you do not want to. You can overwrite the data from another QES file, or a delimited ASCII file that contains question shortcuts.

*To overwrite data using an ID and shortcuts from data in a QES file:*

1. Open the target QES file (the file into which you want to overwrite the data).
2. In the **merge** menu, select **overwrite data using ID and shortcuts**, then **from an Askia QES file**.
3. Select the source file (the file containing the data you want to copy into the target QES), and click **open**.
4. Select the variable that contains the unique IDs that will be used to match the respondent records, and click **OK**.

*To overwrite data using an ID and shortcuts from data in a delimited ASCII file:*

1. Open the target QES file (the file into which you want to overwrite the data).
2. In the **merge** menu, select **overwrite data using ID and shortcuts**, then **from a delimited ASCII file**.
3. Next to **ASCII file**, click ..., then select the source file (the file containing the data you want to copy into the target QES), and click **open**.
4. Next to **ID question**, click ..., and select the variable that contains the unique IDs that will be used to match the respondent records; then, click **OK**.
5. Click **OK** to perform the overwrite operation.

## Recap

In this session, you have learned how to:


- Merge questionnaires together.
- Check whether two QES files have identical question structures.
- Merge questionnaires and data based on ID.
- Consolidate data within a QES file.
- De-duplicate a QES file.
- Overwrite data in one file based on the data in another file.

## Practical exercise

Please do the following exercises; your tutor will tell you which files to use. In these exercises we are updating a QES, adding more data from a follow-up set of interviews with the original respondents, containing in a second QES. First, we will check for duplicate records in the first QES, before we merge in the new data from the second QES.

### Merging in follow-up data

*Please follow these steps:*

1. In askiatools, open the file *merge\_questionnaires\_using\_ID\_1.qes*.
2. In the **merge** menu, select **delete duplicates using id....**
3. Select *Unique\_ID* and click **OK**.
4. In the **merge** menu, select **questionnaires using ID....**
5. Next to **askia file**, click **open**:  

6. Select the file *merge\_questionnaires\_using\_ID\_2.qes* and click **open**.
7. In **respondent ID in target**, select *Unique\_ID*.
8. In **respondent ID in source**, select *Unique\_ID..*
9. Click **OK** to perform the merge.



## Session 406   **Data management**

### Outline

#### Topics

In this session, you will learn about:

- Generate random interviews
- Export a report of response timings
- Export multimedia files
- Repair data problems resulting from poorly encoded character sets
- Automate tasks from the command line

#### Learning outcomes

At the end of this session, you will be able to:

- Generate random interview data when testing your survey's logic
- Use the command line to automate a variety of askiatools tasks

# Material covered

## Generating random interview data

It is often useful to generate random interview data, in order to test the survey routing before fieldwork begins. Because askiatools' randomised interviews follow the survey's routing logic, you can perform data analysis in askiavista or askiaanalyse to detect errors in the routing.

*To generate random interview data:*

1. Open the QES file.
2. In the **tools** menu, select **generate random interviews....**
3. In **number of interviews**, enter the number of records you want to generate.
4. **Number of attempts per question** defines the number of tries that the random generator will make to answer a question where routing blocks progress. For example, if you set this value to 5, the generator will select a random response, and if the routing blocks progress, it will try up select random responses up to four more times (for a total of five attempts) in order to get past the blocking routing. You can enter a value up to 100.
5. Click **OK**.

The Knowledge Base contains further information on Random Generation, including detailed information about the various fields and options available. You can find this article, by going to [support.askia.com/hc/en-us/search?utf8=%E2%9C%93&query=random+data+generation](https://support.askia.com/hc/en-us/search?utf8=%E2%9C%93&query=random+data+generation)

## Reporting on respondent response times

Askia tools can produce a report on how long it took respondents to answer the questions in a QES. This helps you to eliminate interviews with very long response times (which might affect the average) or very quick responses (e.g. a Web respondent who did not read the questions and just selected random answers). The report shows timings for each question in seconds.

*To produce a report on respondent answering times:*

1. Open the QES file.
2. In the **tools** menu, select **export question timing....**
3. Specify a location and name for the report file, and click **save**. The report is generated, and opens automatically in an external text editor program.

## Exporting multimedia files from askiaface

Askiatools allows you to export multimedia files that are attached to open-ended questions in askiaface data. You can apply filters to determine which interviews are selected. One file is exported for each question.

*To export askiaface multimedia files:*

1. Open the QES file containing the multimedia files.
2. In the **tools** menu, select **export multimedia files from open....**
3. Next to **directory**, click ..., select the folder into which the files will be saved. and name for the report file, and click **OK**.
4. Next to **questions**, click .... The *question selection* dialog opens.
5. Move the questions from which you want to export the files into the right-hand list, by selecting them and clicking the right-facing arrow. Note that you can only move open text questions into the right-hand list.
6. When you are satisfied with the selection of questions in the right-hand list, click **OK**.
7. Select which records the files are to be exported from, by setting the following options:

| Option                  | Description   |
|-------------------------|---|
| Export completes only   | Select this if you don't want to export files from incomplete interviews.   |
| Interview started after | You can select a date here, to export only from interviews that began after this date.  |
| Additional filter       | Here, you can specify a filter, written in askiascript, if you want to export only from a subset of the data. Askiascript is beyond the scope of the course; please refer to the askiadesign Assistant for details. |

8. Click **OK** to perform the export. Askiatools exports the files, and informs you how many files were exported.

## Repairing character encoding in Web survey data

Web survey data sometimes contains more than one character set, and this may sometimes not be encoded correctly. Askiatools can repair this.

Note that recent versions of askiafield have improved handling of multiple characters sets, so you should not need to use this utility on data collected in recent versions.

*To repair the character encoding in Web survey data:*

1. Open the QES file containing the data you want to repair.
2. In the **tools** menu, select **translate &#nnn; in questionnaire....** This repairs HTML encoding in the questions and responses.

3. In the **tools** menu, select **translate &#nnn; in interviews....** This repairs HTML encoding in the data.

## Automating tasks

Almost any askiatools command can be run from the command line. For example, to import .dat files from the command line into a QES file, you would use the following syntax:

```
AskiaToolsU.exe "C:\my directory\My Qes File.qes" /importdat  
/datafile:"c:\The directory with the .dat"
```

You can apply a command to multiple files with the FORFILES command:

```
FORFILES /S /M *.qes /C "cmd /S /C ^0x22C:\Program^ Files^  
^0x28x86^0x29\Askia\AskiaToolsU.exe^0x22 @PATH  
/deleteinterviews /completes /incompletes"
```

You can also repeat a set of commands by putting them into a batch file.

Full details can be found at <https://support.askia.com/hc/en-us/articles/200003451-Automate-tasks-via-Command-line>.

This feature can be used in tandem with askiavista's scheduled tasks, so that you can trigger askiatools commands on a schedule from within askiavista.

## Recap

In this session, you have learned:

- How to generate random interview data.
- How to produce reports on respondent answering times.
- Exporting askiaface multimedia files.
- Automating tasks with the command line.

# Practical exercises

Please do the following exercises; your tutor will tell you which files to use.

## Exercise 1: Generating random data

*Please follow these steps:*

1. In askiatools, open the QES file your tutor provides.
2. In the **tools** menu, select **generate random interviews....**
3. In **number of interviews**, enter 100.
4. Click **OK**.

## Exercise 2: Exporting questions timings and multimedia files

1. In askiatools, open the file *export\_timings.qes*.
2. Export the question timings from this QES.
3. Open the file *example\_export\_media.qes*.
4. Export the multimedia files.



## Session 407 **Verifying and coding data**

### **Outline**

#### **Topics**

In this session, you will learn about:

- Postcode open-ended questions
- Incomplete data analysis

#### **Learning outcomes**

At the end of this session, you will be able to:

- Perform coding from within Tools
- Run checks for incomplete data

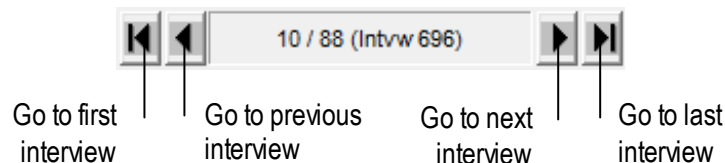
## Material covered

### Coding open-ended questions

Askia recommends that you use KODIM to code open-ended questions. However, you can do your coding in askiatools.

*To carry out coding in askiatools:*

1. Open the QES file you want to code.
2. In the questionnaire view, select the question you want to code. This must be an open text question.
3. In the **tools** menu, select **post-code an open question....**
4. If you have not already done coding on this question, you will prompted to enter a shortcut for the new, coded question that will be created. Enter the shortcut, and click **OK**.
5. In the right-hand pane, you can define and select responses to the new closed question. The left-hand pane shows the data in the open question. Step through the records and code the responses by selecting the appropriate responses.
6. Navigate through the records as follows:



7. To add a new response, click **ins**, enter the response text and click **OK**.
8. To select one or more responses for the current record, click the checkbox next to it. To de-select a response, simply click the checkbox to clear it.
9. To change a response caption, click the response and then click **Ab**. Type the new label for the response, and click **OK**. You should be very careful when doing this for responses that have already been selected, as you could change the meaning of coding that has already been done.
10. When you have finished coding the question, click **OK**.

### Reporting on incomplete data

Askiatools can produce a report on whether records are complete. The report checks the data against the questionnaire's routing and identifies records that have not reached the end of the interview by a valid path. An example of use would be for identifying web interviews where the respondent dropped out before completing the interview.



Note that the report is checked against the latest version of the routing, so if the routing changed mid-way through fieldwork, earlier records may be incorrectly identified as complete or incomplete.

*To produce a report on incomplete data:*

1. Open the QES file.
2. In the **tools** menu, select **incomplete data analysis....**
3. Next to **output file**, click ..., select the location and filename of the report file you want to create, and click **save**.
4. In **additional info**, select as follows:
  - **No information about interview:** the report contains information about the number of incomplete interviews for each question.
  - **Show interview information with each question:** the report contains information about the number of incomplete interviews for each question, along with the interviewID and the start/end interview time.
  - **Show interview information after question summary:** the report contains information about the number of incomplete interviews for each question, and then, after the question summary, the interviewID and start/end interview time.
5. Click **OK** to run the report.

## Data editing

It is possible to create and run special scripts that carry out data checking. They are created in askiadesign and then run in askiatools. They are beyond the scope of this course, but Askia offers a separate data edits course that we recommend you take if you are likely to use this functionality.

More information on the concepts involved in running “edits” routings, with downloadable examples, can be found in the Askia Knowledge Base. You can find this article by going to [support.askia.com/hc/en-us/search?utf8=%E2%9C%93&query=edit+routings](https://support.askia.com/hc/en-us/search?utf8=%E2%9C%93&query=edit+routings)

## Recap

In this session, you have learned how to:

- Code open questions
- Produce a report on incomplete interviews

## Practical exercises

Please complete the following exercises. Your tutor will tell you which files to use.

### Exercise 1: Generating random data

Firstly, let's generate some random interview data in a QES.

*Please follow these steps:*

1. In askiatools, open the QES file your tutor provides.
2. In the **tools** menu, select **generate random interviews....**
3. In **number of interviews**, enter 100.
4. Click **OK** to generate the interviews.

### Exercise 2: Coding open questions

Now, code an open question.

*Please follow these steps:*

1. In askiatools, open the QES file your tutor provides.
2. In the question tree, select the question you are going to code (your tutor will nominate one).
3. In the **tools** menu, select **post-code an open question....**
4. Enter an appropriate **question shortcut**, and click **OK**.
5. Use the coding interface to code a few responses.
6. Click **OK** when you have finished.

### Exercise 3: Running checks on the QES

Next, let's run an incomplete data analysis on the QES.

*Please follow these steps:*

1. In askiatools, open the QES file your tutor provides.
2. In the **tools** menu, select **incomplete data analysis.....**
3. Specify a location and name for the output file.
4. Click **OK** to generate the report.
5. View the report when it opens.