# Editing a form with Sintropia-DS

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When you start Sintropia-DS for the first time the password is SINTROPIA, all written in capital letters. The program will enter the archive in data-entry mode and will be positioned on the first empty form at the end of the archive. At the beginning you can exercise on the archive Monteoro, relative to 1088 questionnaires answered by high school students.

In order to create a new form t is necessary to choose the option "Edit/create form" of the menu "Data". This option opens the window which allows to create new archives and forms. This window is divided into 5 pages:
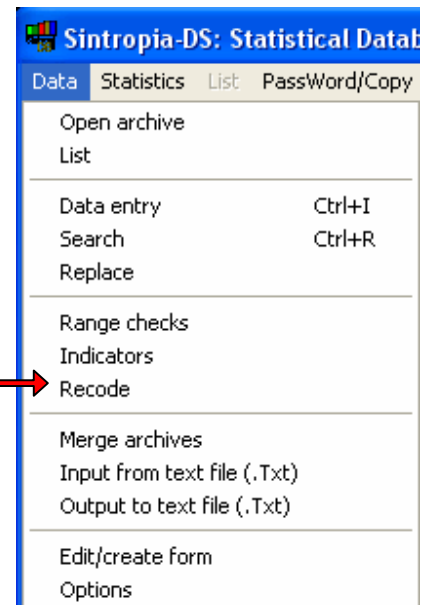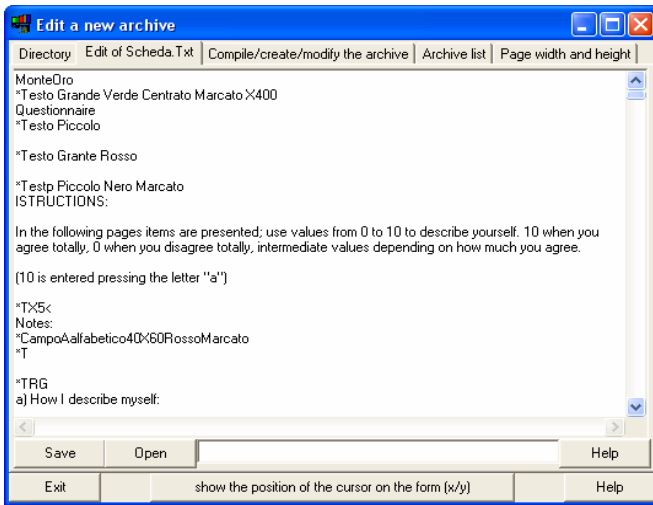
- *Directory*: a Sintropia-DS archive needs a directory (folder) and it is possible to save only one archive in one folder.
- *Edit of Scheda.txt*: file Scheda.txt is the file in which you edit the form (in Italian "Scheda" means "Form").
- *Compile/create/modify the archive*: file translates Scheda.txt into Sintropia-DS pages.
- *List of archives*: allows to create a list of the archives which are more frequently used.
- *Page width and height*: it is possible to modify the dimensions of the page of the program (horizontal and vertical pixels).

Directory

It is not possible to enter more than one archive in the same folder. Usually the directory address shown in the directory page coincides with the active archive; when you want to create a new archive you:
- *First enter the address of the directory*: the address can not have more than 35 characters. Avoid therefore long folder names.
- *Create the directory*: it is possible to create the directory from this page or using Window's resources.

Edit file Scheda.TXT

File Scheda.Txt needs to be edited in the directory where the archive will be created; this file contains information about the structure of the record, items names, labels.

Scheda.Txt is a text file which you can edit with Sintropia-DS page "Edit of Scheda.txt". But when the dimension of the file exceeds 32k (32,000 characters) it is necessary to use a word processor (for example Word-Pad) and remember to save the file always as text (.Txt).

File Scheda.Txt contains:

1. the name of the archive (first line);
2. text command lines, which start with *T* and are followed by lines with the text which will be shown on the form (for example questions and instructions);
3. field command lines, which start with **C** and are followed by the definition of the data;
4. page command lines, which start with *P* and divide the form into different pages.

*Text command line (*T)*

A command line start with the character *. Commands are written in capital letters, all what is written in small letters is omitted and considered as a note, except for the words: *elvetico, courier, arial, modern, roman* which define the font type. In a form it is possible to specify at the most 9 combinations of colours, fonts, and character dimensions. When this number of combinations is exceeded information will be shown using the first combination of characters. If the colour, justification, dimension are not specified, the program will use the definitions of the last field. When no indication is given the colour black is used, text will start from the left of the form at pixel n. 5 and will be justified to the left. If you want to start text at a different pixel position you use the

COMMANDS RELATIVE TO TEXT (*T)	
"C"	Centered text
"<"	Left justified text
">"	Right justified text
"_"	Underlined text (_)
"I"	Italics
"M"	Bold
"S"	Normal text
"G"	Big character
"P"	Small character
"N"	Black
"R"	Red
"B"	Blue
"V"	Green

character X followed by the number of the horizontal pixel, or character Y followed by the

number of the vertical pixel (starting from the top). If character Y is followed by an equal sign (Y=) text will be written at the same vertical position used by the last definition. Text command lines are followed by one or more lines of text which will be shown on the page.

Field Command line *(*C)*

Commands relative to fields *(*C)*	
"I"	Italics
"M"	Bold
"S"	Normal (bold off)
"G"	Big text
"P"	Small text
"N"	Black text
"R"	Red text
"B"	Blue text
"V"	Green text

Commands are written in capital letters, all what is written in small letters is omitted and considered as a note, except for the words: *elvetico, courier, arial, modern, roman* which define the font type. By default fields start at X position 100 (100 pixel from the left). If you want to start the field at a different pixel position use character X followed by the number of the horizontal pixel, or character Y and followed by the number of the vertical pixel (starting from the top). If character Y is followed by an equal sign (Y=) field will be shown at the same vertical position used by the last definition. Letter Z followed by the horizontal position tells where the field will end; when not used the right margin of the form will be used. Field command characters ***C** are followed by the definition of data type:

Data type	
*CAnnn:	Alphabetic field, followed by the number of characters which have been reserved (nnn).

*CC	Coded field. Coded fields are all those which use a list of labels. For example:
	  *T
	  MARITAL STATUS
	  *CC
	  unmarried
	  married
	  separated
	  divorced
	  widow
	
	When a coded field type is followed by the character # and a number, the list of labels is stored or a previously defined list with the same number is used. Attention! Labels can not start with numbers, as numbers are always interpreted as codes.

*CCnn	When a coded field command is followed by a number (nn) it tells to use nn fields for data-entry: *CC3* tells to reserve 3 fields for data-entry.
*CCnn,c	If the number of fields is followed by a comma and a number (c) it tells to divide fields in "c" lines. For example *CC21,3 will reserve 7 lines with 3 fields for each line.
*CQ	Quantitative field from -32,000 to +32,000
*CL	Long quantitative field from -999,999,999 to +999,999,999
*CT	Territorial field (uses official census lists of towns)
*CO	Time field
*CD	Date field
*CP	Percentage field

*P (Page) command line is used in order to change page.

Creation of a new archive

Steps:

1. create the directory (folder) in which you want to store the archive. It is possible to create the folder using the button "Creates the directory" or using Window's options.
2. Edit *scheda.txt* using the page "Edit Scheda.Txt"; this page allows to edit files as long as 32,000 characters. It is usually more convenient to edit *scheda.txt* using a word processor (for example WordPad), though some programs create errors (for example Microsoft Word) due to the fact that they do not allow to share files with other programs.
3. While you are editing *scheda.txt* it is good habit to compile it in order to immediately see if there are errors.

For example edit the form:

Friends	
a. General data	***b. Contact***

1.   Last name: *(alphabetical)*
 2.   Name: *(alphabetical)*
 3.   Address: *(alphabetical)*
 4.   Town: *(census list)*
 5.   State *(coded)*:
     1. Piemonte
     2. Lombardia
     3. Veneto
     4. -
 6.   Zip code: *(alphabetical)*
 7.   Telephone: *(alphabetical)*
 8.   E-mail: *(alphabetical)*
 9.   Birth date: *(day/month/year)*
 10. Sex:
     1. male
     2. female
	1. How frequently we meet:
	    a. every day
	    b. some days in a week
	    c. one time a week
	    d. two times in a month
	    e. once a month
	    f. less than once a month
	
	 2. Which is the quality of the contact:
	    a. Very good
	    b. good
	    c. fair
	    d. not good
	
	 3. Which sports does he/she like:
	    a. jogging
	    b. skiing
	    c. tennis
	    d. swimming

Usually you just need to copy the word processing file and add the command lines required, for example:

```
Form 1
*TCGMX400
Friends

*TPI<X5
a. General data
```

```
*T I
a1. Last Name:
*CA50
*T
a2. Name:
*CA50
*T
a3. Address:
*CA50
*T
a4. Town:
*CT
*T
a5. State:
*CC
  Piemonte
  Lombardia
  Veneto
*T
a6. Zip code:
*CA5
*T
a7. Telephone:
*CA50
*T
a8. E-mail:
*CA50
*Testo
a9. Birth day:
*CD
*T
a10. Sex:
*CC
  male
  female
*P
*TI

b. Contact

*TI
b1. How frequently we meet:
*CC
  every day
  some days in a week
  one time a week
  two times in a month
  once a month
  less than once a month
*T
b2. Which is the quality of the contact:
*CC
  Very good
  good
  fair
```

*P starts a new page. In order to change page use PgDn and PgUp keys.

```
     not good
*T
b3. Which sports does he/she likes:
*CC
   jogging
   skiing
   tennis
   swimming
```

You can copy this example and paste it in the "Edit file Scheda.Txt" window and choose the button "Compile the archive for the first time" and exit the "Edit a new archive" window. If the program shows and empty page, probably you have not saved *scheda.txt*, save *scheda.txt* and choose again the button "Compile the archive for the first time".

Position of the data-entry field
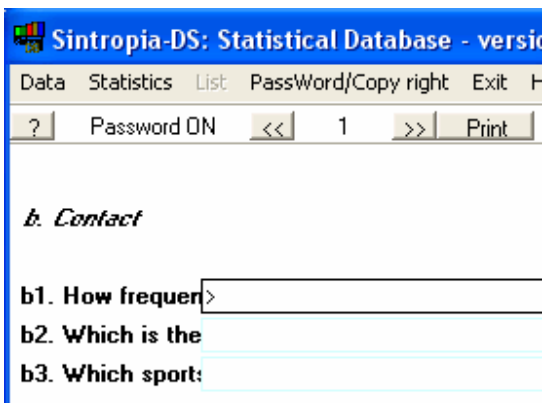
Go to the second page of the form that you have just compiled, you will see that many strings are truncated, overwritten by the data entry field. It is possible to use the button "show the position of the cursor on the form (x/y)" (in "Edit a new archive" window) to find out pixel positions on the form; in this way it is possible to click at the end of a string and find out the corresponding pixel, from which data entry field should start.
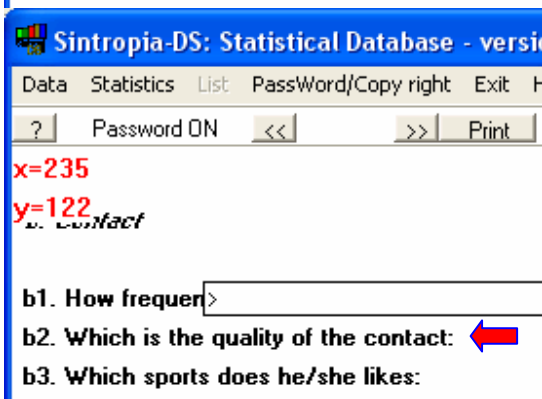
When you press the button "show the position of the cursor on the form (x/y)" the program goes back to the form and each time you click on the left button of the mouse the program will answer telling which is the X pixel position and the Y pixel position. Pointing the cursor at the end of the item b2 and clicking on the left button the X position obtained is 235. It is then possible to modify the text of Scheda.Txt in the following way:

```
*T
b2. Which is the quality of the contact:
*CCX235
```

Save this change and compile *scheda.txt*.

Logo and images

It is possible to add an image, a logo, saved in the file "logo.bmp". The image will be shown on each page of the form starting from the left-upper angle. If you want to move the logo on the form, move the logo on the .bmp file down or right the number of pixels you want it to be moved.

Compile/create/modify the archive

This page contains 3 buttons:

- *Compile the archive for the first time*: this button is used the first time you compile the archive.
- *Compile an already existing archive*: this button is used while editing it *scheda.txt*.
- *Update parameters and erase data*: this button is used when you finish editing *scheda.tx*.

Diagnostics

The following text is found in the folder "diagnostics1":

```
Example
*T
Diagnostic example
*T
Field 1:
*CC
Yes
No
```

If you introduce an error, for example add a field in which data type is not defined:

```
*T
Field 2:
*C
very good
good
fair
bad
```

When compiling the program will answer with the following diagnostics:

```
11, field type not defined *C
12, List after a pointer to a list (#) -> very good
13, List after a pointer to a list (#) -> good
14, List after a pointer to a list (#) -> fair
15, List after a pointer to a list (#) -> bad
```

The number at the beginning of the line corresponds to the line in which the error was encountered. The program shows the text which has produced the error, in this way it is possible to find the line even when you are using a word processor which does not show line numbers. Line 11 causes errors also in the following lines with: labels are not compiled

correctly. Now, go back to *scheda.txt* and change *C in *CC (coded field) and compile again, no diagnostic file will appear.

The use of Wordpad

Sintropia-DS editing window can handle files up to 32K (32,000 characters). When the form is long and complex the use of a word processor is more convenient; Wordpad is more convenient than Word, as Word does not allow to share files with other programs and it often adds special characters which produce compiling errors. *It is important to save the file as Text (.Txt).*

Page dimensions
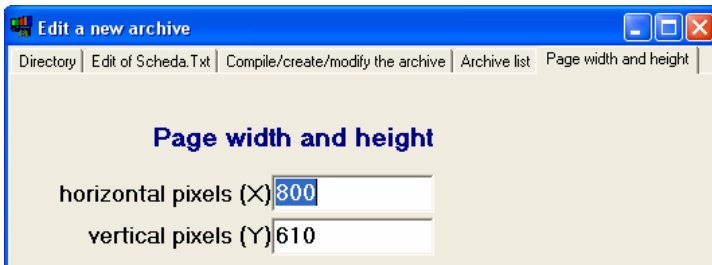
When the width and the height of the page are changed it is necessary to compile again the form in order to update all the parameters with the new dimension parameters.

Optimizations

When the editing of the form is over it might be useful to optimize some data-entry functions. Optimization options can be found in the window "Options" which is available at the end of the menu "Data". Let us see which options are available:

Optimization options	
TABS	Tabs allow, during data-entry, to jump quickly to the next group of items.
QUICK DATA-ENTRY FIELDS	When using coded fields it is possible to enter information in 3 ways: 1. choosing the label from the list of labels (check list) 2. writing the text of the label 3. entering the code number of the label On a quick data-entry field it is possible to enter codes pressing one character: "0" to "9" for codes "0" to "9" and "a" to "z" for codes from 10 to 35.
FIELDS IN WHICH 0 IS CODED AS 1	In coded fields, 0 is treated as the missing answer. In tests which use scores which go from 0 to 10, 0 is treated as a coded label and it is necessary to increase this code by one (and consequently all the other codes).

Configuration options

GO-TO CONDITIONS	Depending on the information which has been entered, it might be convenient to jump automatically to a different section of the form. In the file "*sal-sch.imp*" information about these automatic go-to is entered. For example: `5=3,7>30` means that when the field "5" has a value between 3 and 7 then jump to field 30. It is possible to enter more conditions. One line, one go-to condition. For example:
	`5=3,7>30`
	`5=8,8>35`
	If field 5 has a value between 3 and 6 then go-to field 30. If field 5 is equal to 8 then go-to field 35. If the jump is relative to information present in a different field then the syntax is the following:
	`7=5=3,7>30`
	When on field 7 if field 5 has a value between 3 and 7 then jump to field 30.

SAVE OF FORM CHECKS	It is possible to perform checks before saving information. For example: 1,Operator 2,Date 9,Client If no information is present in one or more of the listed fields the program will show a window informing that data is missing and asking what to do before saving.
COLOR	It is possible to high-light the data-entry fields using a special color.
UPDATE LABELS	When a new label is entered the program shows the list of known labels and asks if the new label has to be added to the list. This function allows to create lists while data is entered, and is often used on items which were difficult to code. When data entry is done using more than one computer, this option can create problems; it is therefore possible to disable it from the option window.
MOUSE	When data-entry has been optimized, it can be convenient to disable the use of the mouse, in order to avoid accidental jumps from one field to the other.

Fields
NUMBER	Field numbers are used to set several options of the program (go-to options, save of form checks). When choosing this option the program goes back to the form and in each field shows the corresponding field number.
POSITION	It is used by programmers who need to develop applications which interact directly with Sintropia-DS files. Data are stored in two different files, the alphabetical file *alf-sch.dat* and the numeric file *num-sch.dat*. When the position option is chosen the program goes back to the form and shows, for each field, the position in each file. To know the length of each record use the option "List" of the menu "Data".