

Requirements

The following are required to install and run the Data Assistant application:

- IBM Compatible PC computer
- Microsoft Windows XP with Service pack 1, or Microsoft Windows Vista
- .NET Framework 2.0
- Archive extraction tool such as WinZip or Microsoft Windows.

Installation

Your Data Assistant application is shipped as a zip file, ready for deployment into your local environment.

To install the Data Assistant application:

1. Open the DataAssistant.zip file using Winzip, Windows, or a zip-compatible archive extraction tool of your choice.
2. Extract the DataAssistant.exe file to your preferred location.
 - *NOTE: the recommended location is the Windows desktop.*
3. The installation is complete and the application is ready to run.

Description

The Data Assistant application is a tool which facilitates the conversion of data from a textual-based delimited form such as CSV (Comma Separated Values) to another form such as HTML, XML or SQL.

Anyone wishing to convert data from one compatible text form to another may find a use for this application. This may be for the purposes of data migration, data formatting and data import / export.

Starting the application

1. To start the application, double click on the DataAssistant.exe file which was extracted from the zip archive in the above section (Installation)
2. The application will start.

Finding your way around

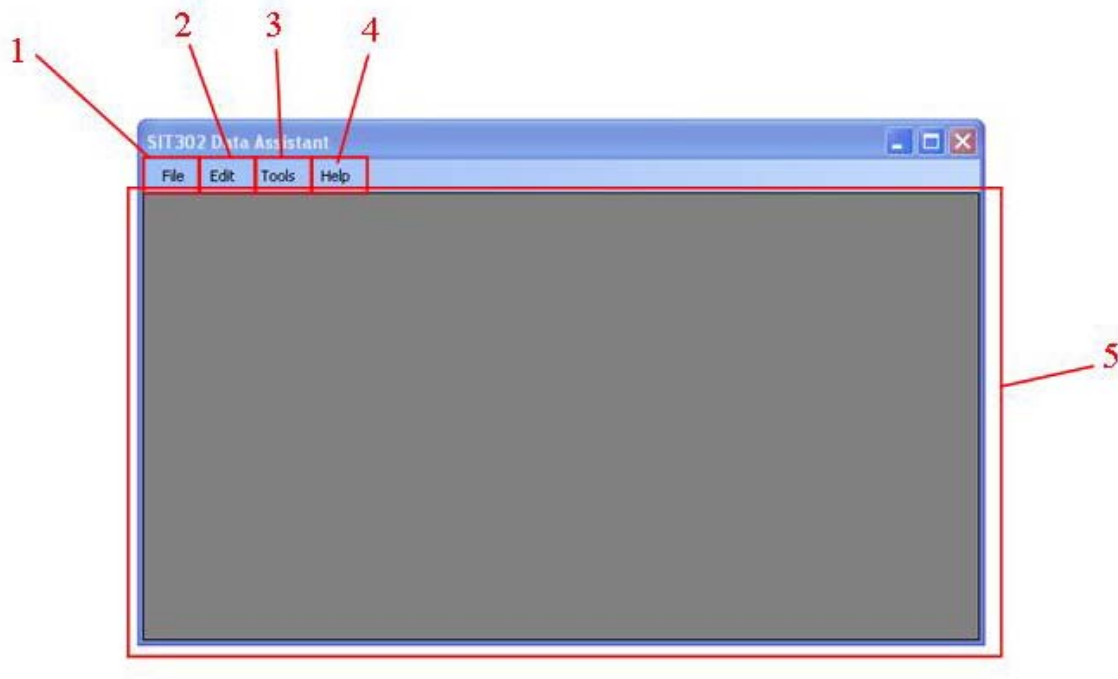


Fig 1.1 : Main Application Window

Legend:

1. File Menu – This contains the functions for importing and exporting data to the main workspace (5)
2. Edit Menu – The edit menu contains the find and replace functionality as well as the functions to select and deselect all items in the workspace.

3. Tools Menu – This menu contains tools which you can use to manipulate data. Refer to section ??? for a detailed summary of each tool.
4. Help Menu – The help menu contains information about the program.
5. Workspace – The workspace area is where the data is viewed. The workspace allows you to manipulate the data, and to sort the data.

Importing a file

To begin working with the application, you must first import a file. File that can be imported are:

- Comma Separated Values File (CSV) – These files contain plain text. Values are delimited by a comma, and rows are delimited by a linefeed (new line)
- Tab Separated File (TAB) – These files contain plain text. Values are delimited by a TAB, and rows are delimited by a linefeed (new line).
- User Specified File – Any plain text file that has values delimited by any character, and rows delimited by a linefeed (new line).

To import a file:

1. Click the File -> Open menu or press Ctrl + O

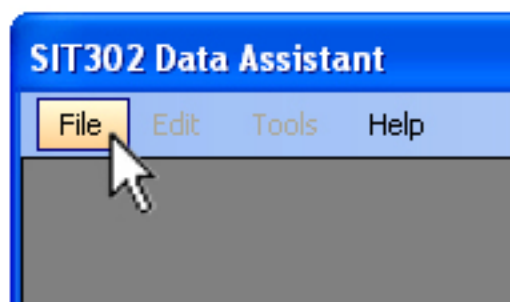


Fig 1.2 : File menu

2. The "Open File" dialogue will show.

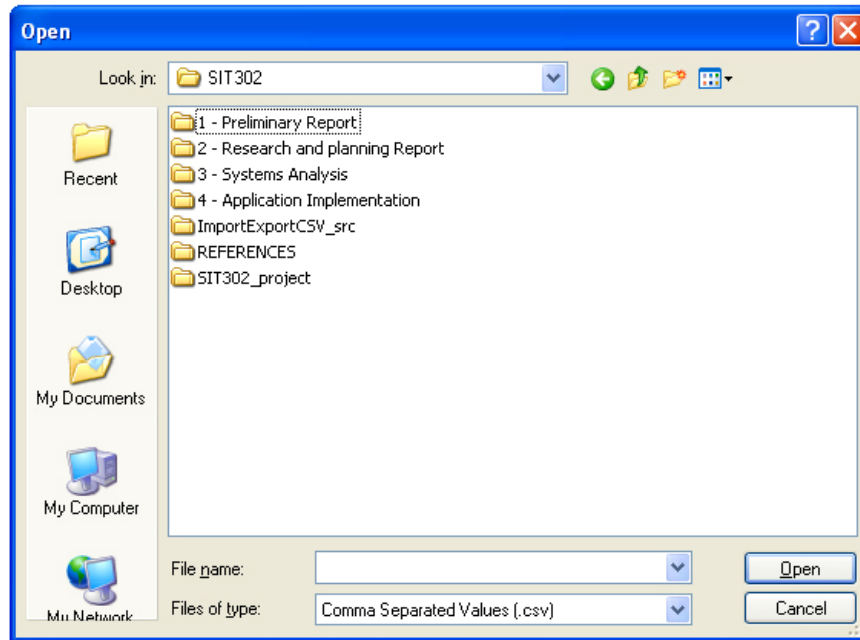


Fig 1.3 : Open file dialog

3. Select the file to import
4. Click the "Open" button.
5. Choose the delimiter which separates the values in the file, or choose "other" and supply your own. Comma is selected by default.

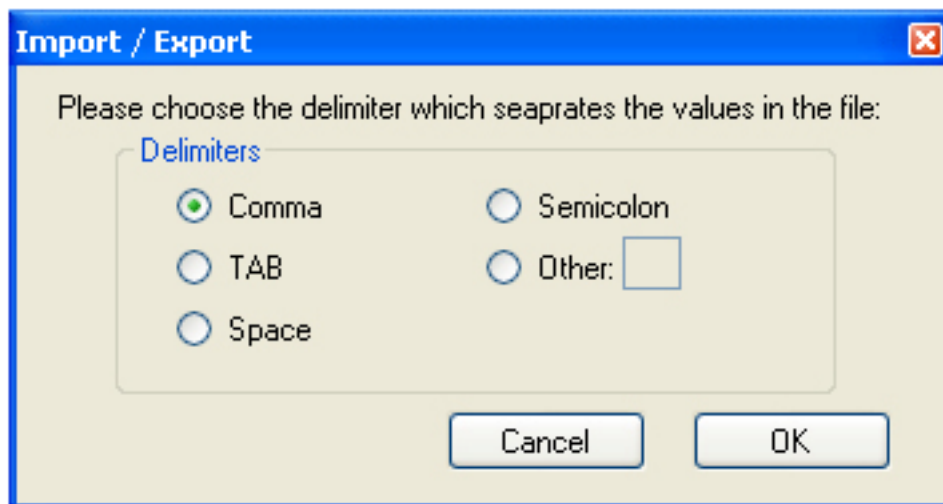


Fig 1.4: Import dialog

6. Click OK

Once these steps are complete, a validation will be performed on the file. If there are validation errors with the file, the validation dialog will appear.

Validation

Validation checks that the file you are importing contains data which is consistent. Validation will alert you if:

- There are cells within your data which are empty, when other cells within that data contain information.
- There are empty rows found within your data.

To complete validation:

1. The Validation window will appear and provide you with an informative message about the problems with your data.

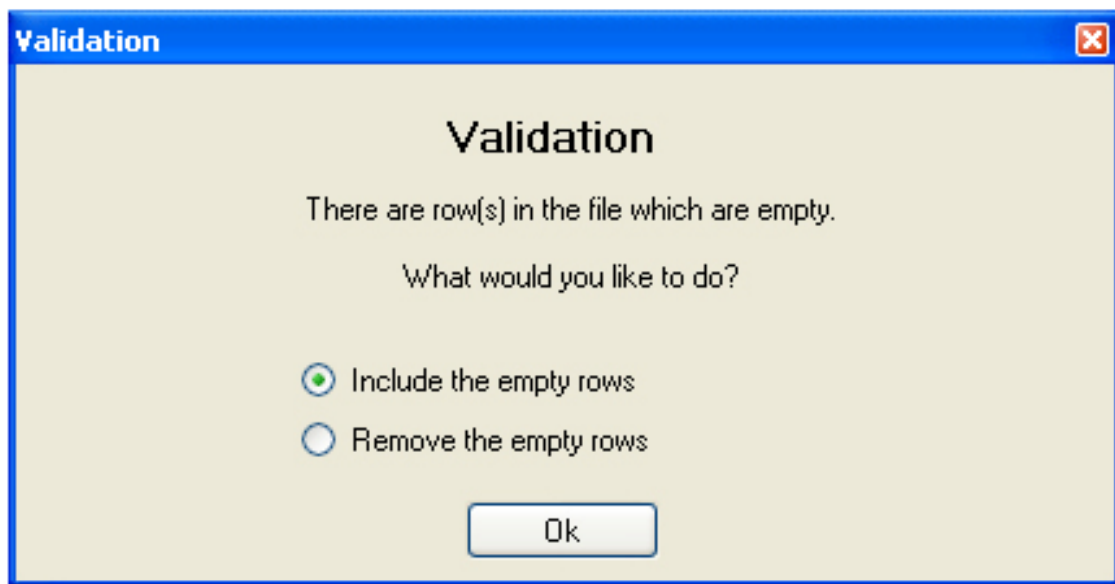


Fig 1.5 : Validation window

2. Select an appropriate action by clicking one of the radio buttons.
3. Click OK.

If further validation errors are discovered, you may need to repeat this process.

Navigating the workspace

Once you have imported your file and any validation has completed, the data file will be loaded into the workspace.

Selecting Items

In order to use the various tools available throughout the tools menu (described later), you may need to select specific parts of the data that you wish to perform an operation on. Selecting data is achieved in one of the following ways:

Selecting Cells

To select a cell, simply click it with the left mouse button

Selecting Rows

To select a row, click the row header (to the left of the row)

Selecting a range

To select a range of data, left click on a cell and drag the mouse so that the desired cells become highlighted.

Selecting All

To select all cells, choose the Edit -> Select all menu item, or press Ctrl + A.

Selecting None

To deselect (select none) all cells, choose the Edit -> Select None menu item.

Editing Cells

To edit a cell, simply select it (refer to "Selecting Cells" above). The cell will become highlighted and the text can now be edited. Once editing is complete, hit the Enter or TAB key to commit your changes.

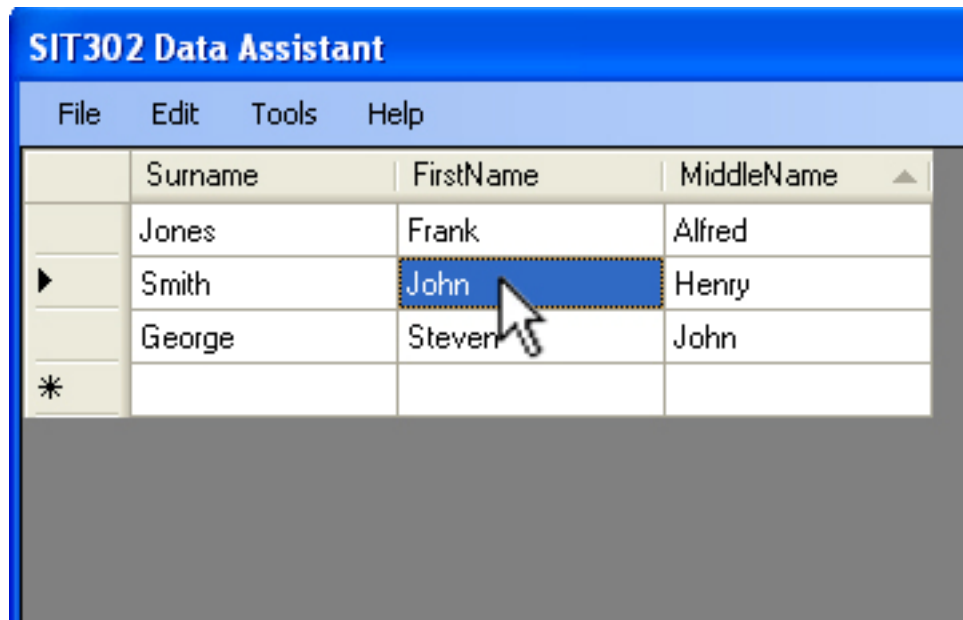


Fig 1.6 : Editing a cell

Editing Column Headings

To edit a column heading, right click on the column heading. A popup menu will appear with a text box. Enter the desired new heading into the text box and hit the Enter or TAB key to commit your changes.

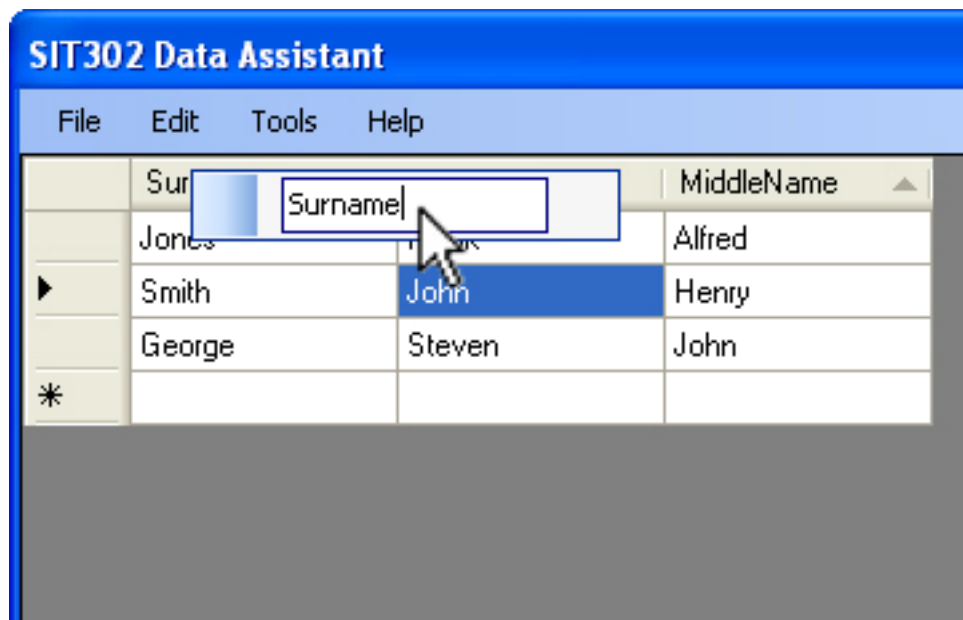


Fig 1.7 : Editing headings

Sorting

The contents of the workspace can be sorted. Click the column heading corresponding to the column you wish to sort. The workspace will sort in ascending order according to that column. To sort descending, click the same column again.

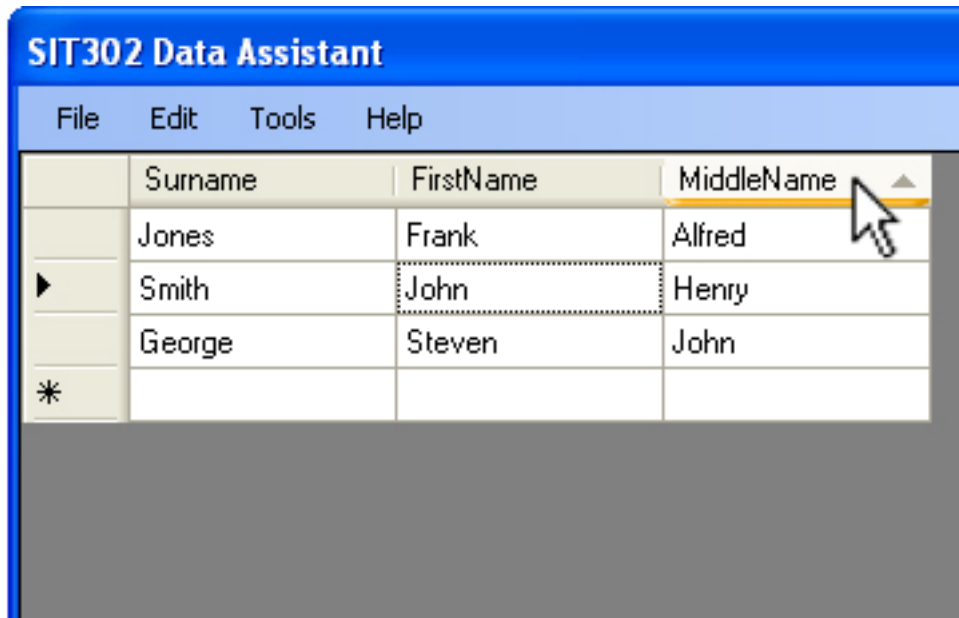


Fig 1.8 : Sorting a column

Resizing Columns and Rows

Columns and rows can be resized for ease of viewing. Please note that column and row resizing will have no effect on the exported data. To resize a column or row, click on the dividing line between, and drag to the desired width.

Find and Replace

Find

The find feature allows you to locate specific text within your data. To find text:

1. Click the Edit -> Find menu or press Ctrl + F
2. The find dialog will appear

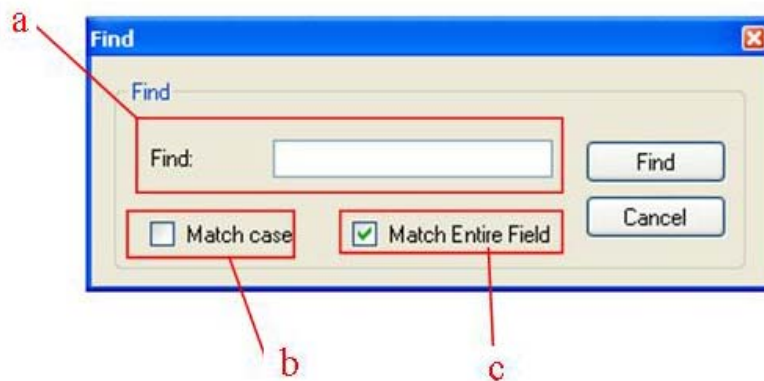


Fig 1.9 : Find dialog

Legend:

- a) Text Box – This is where the string to find is specified.
 - b) Match Case – Selecting this option will only show results which match the case you specified. That is, the combination of upper case and lowercase letters.
 - c) Match Entire Field – Selecting this will only produce results where the specified text matches the text of an entire cell in your data. Unchecking will find the specified text in any part of a cell.
3. Enter the search term in the text box.
 4. Click the checkbox "Match case" if you wish to match the casing of your criteria.
 5. Uncheck the "Match Entire Field" option if you wish to search for your text in part of a cell.
 6. Click Find.
 7. If any results are found, the cell will become highlighted.

8. Repeat steps 6-7 to find additional occurrences.

Replace

The Replace feature allows you to locate specific text within your data and to replace it with other text. To replace text:

1. Click the Edit -> Replace menu or press Ctrl + R
2. The Replace dialog will appear

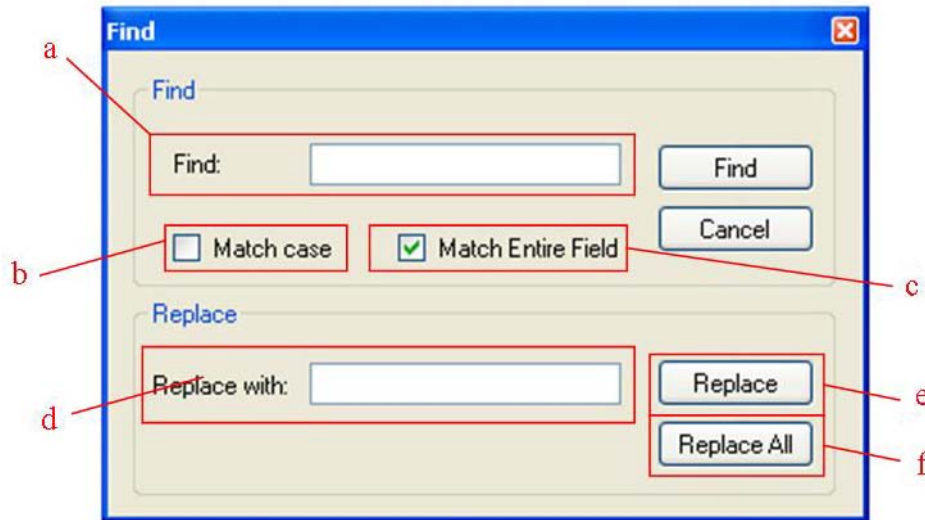


Fig 1.10 : Replace dialog

Legend:

- a) Find Text Box – This is where the string to find is specified.
- b) Match Case – Selecting this option will only show results which match the case you specified. That is, the combination of upper case and lowercase letters.
- c) Match Entire Field – Selecting this will only produce results where the specified text matches the text of an entire cell in your data. Un-checking will find the specified text in any part of a cell.
- d) Replace with – The text to replace the found text with
- e) Replace button – Replaces the current occurrence.
- f) Replace All button – Replaces all occurrences of the specified text.

3. Enter the text to search for into the find text box.
4. Enter the text to replace with into the Replace text box.
5. Click "Find" to find an occurrence
6. Click "Replace" to replace the occurrence.
7. Alternatively, click "Replace All" to replace all occurrences.

Using Tools

Tools Overview

The Data Assistant tools are a handy way to manipulate large volumes of your data in preparation for export. A summary of each tool is presented below.

Escaper

The escaper tool allows you to escape characters within the data with other characters. This is frequently required for sql statements and alike. To escape data:

1. Select the data you wish to escape (refer to Selecting Items above)
2. Click the Tools -> Escaper menu item
3. The Escape Characters dialog will appear

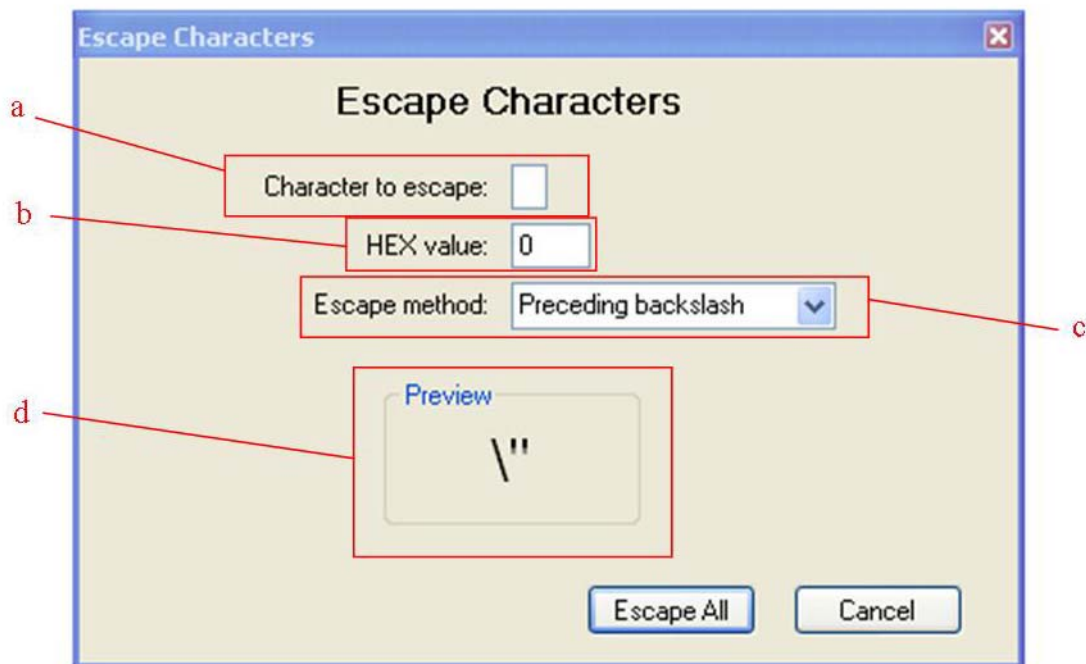


Fig 1.11 : Escape Characters dialog

Legend:

- a) Character to escape – This is the character within the data which needs to be escaped. Printable characters can be entered directly into the text box via the keyboard.
 - b) Hex Value – To escape non-printable characters, you can enter the hex value of the character in this text box.
 - c) Escape Method – A range of escape methods are available. Choose the most appropriate for your purposes
 - d) Preview – The preview shows how the escape will look once applied to the data.
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- 4. Enter the character to escape, or type its hex value.
 - 5. Choose the escape method desired.
 - 6. Click "Escape All"

URL Encoder

The URL Encoder will prepare the data for use in URLs. This replaces certain characters with encoded variants.

- 1. Select the data you wish to URL encode (refer to Selecting Items above)
- 2. Click the Tools -> URL Encoder menu item
- 3. The selection will be encoded.

Capitaliser

The capitaliser allows you to change the case of text within your data. Text can be changed to UPPERCASE, lowercase and Proper Case. To change the case of text:

- 1. Select the data you wish to capitalise (refer to Selecting Items above)
- 2. Click the Tools -> Capitaliser menu item



Fig 1.12 : Capitaliser dialog

Legend:

- a) UPPERCASE - Changes the text to UPPERCASE
 - b) lowercase – Changes the text to lowercase
 - c) Proper Case – Changes the text to Proper Case
3. Select the desired casing
 4. Press OK to apply the changes to your selection.

Exporting Data

Export as text (delimited)

This function allows you to export as a text-based delimited format such as CSV.
To export as text:

1. Click the File -> Export As -> text (delimited) menu item
2. The Import / Export dialog will appear.

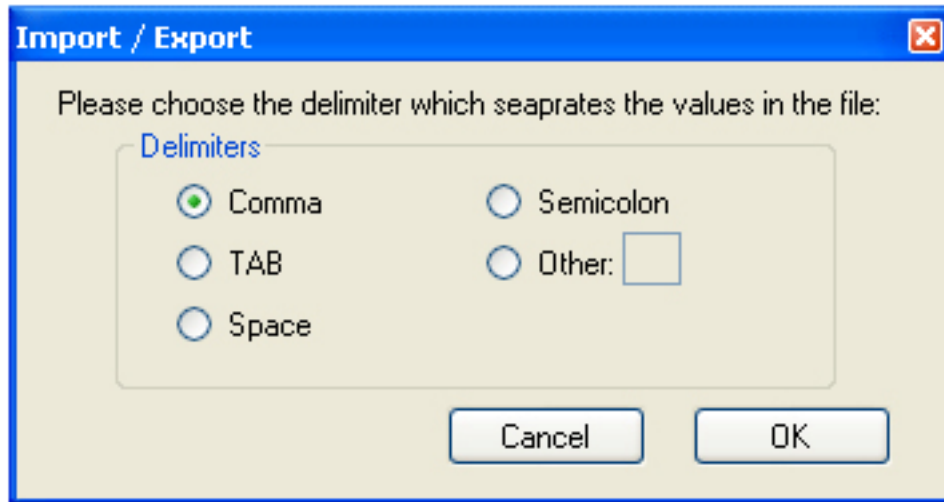


Fig 1.13 : Import/ export dialog

3. Choose the delimiter you wish to use and click OK.
4. Choose a valid filename and file extension and click "Save"
5. The file will be saved and launched if possible.

Export as sql

This function allows you to export the data as SQL statements for import to a database. To export as SQL:

1. Click the File -> Export As -> SQL menu item
2. The Export as SQL dialog will appear:



Fig 1.14 : Export as SQL dialog

3. Select whether you would like CREATE TABLE and/or INSERT statements generated.
4. Enter a name for the table. The name must not include spaces.
5. Click Next
6. The SQL Data Types dialog will appear:

Field	Data Type	Size
Surname	VARCHAR2	5
FirstName	VARCHAR2	4
MiddleName	VARCHAR2	5

1.15 : SQL Datatypes dialog

7. Choose the desired data types for each field of the table. The system has predicted the most appropriate datatypes for you.
8. Enter a size for the field. The system has predicted the most appropriate sizes for you.
9. You may rename the fields if required.
10. Click Export.
11. Enter a filename.
12. Click Save.
13. The file will be saved and will open if possible.

Export as html

This function allows you to export as a html file where the data is presented in a html table. To export as html:

1. Click the File -> Export As -> html menu item
2. The export as HTML window will appear:

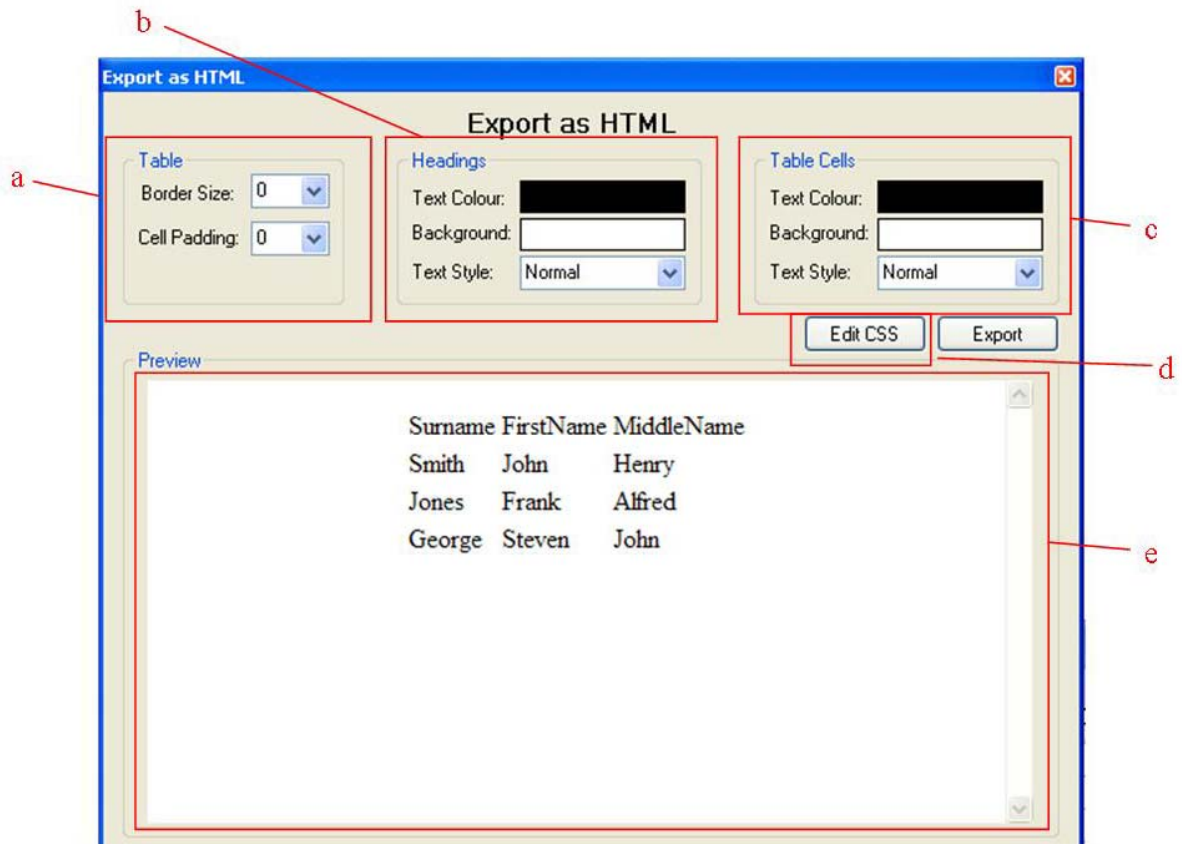


Fig 1.16 : Export as html dialog

Legend:

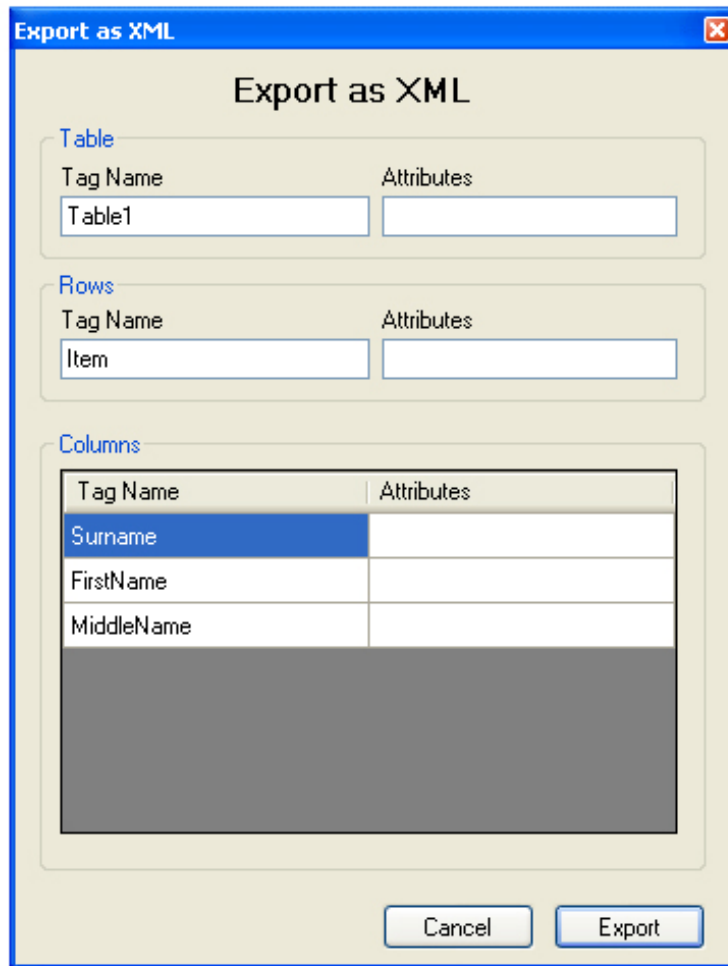
- a) Table settings – This allows you to specify the border size and cellpadding for the table
- b) Heading settings – This allows you to specify the text colour, background colour and text style for the headings of the table
- c) Table Cell settings – This allows you to specify the text colour, background colour and text style for the cells of the table.

- d) Edit Css button – This allows you to edit the raw CSS for the html document.
 - e) Preview area - This show you how the exported html document will look.
3. Choose the desired formatting setting using each of the controles listed above.
 4. When you are satisfied with the appearance of the table, click Export.
 5. Enter a filename.
 6. Click Save.
 7. The file will be saved and will open if possible.

Export as xml

This function allows you to export as an xml file. To export as xml:

1. Click the File -> Export As -> xml menu item
2. The export as XML window will appear:



The dialog box is titled "Export as XML" and contains three sections: "Table", "Rows", and "Columns".

Table Section:

Tag Name	Attributes
Table1	

Rows Section:

Tag Name	Attributes
Item	

Columns Section:

Tag Name	Attributes
Surname	
FirstName	
MiddleName	

At the bottom of the dialog are "Cancel" and "Export" buttons.

Fig 1.17 : Export as xml dialog

3. Enter the desired table name and attributes
4. Enter the desired row name and attributes
5. Enter the desired column names and attributes
6. Click Export.
7. Enter a filename.
8. Click Save.
9. The file will be saved and will open if possible.