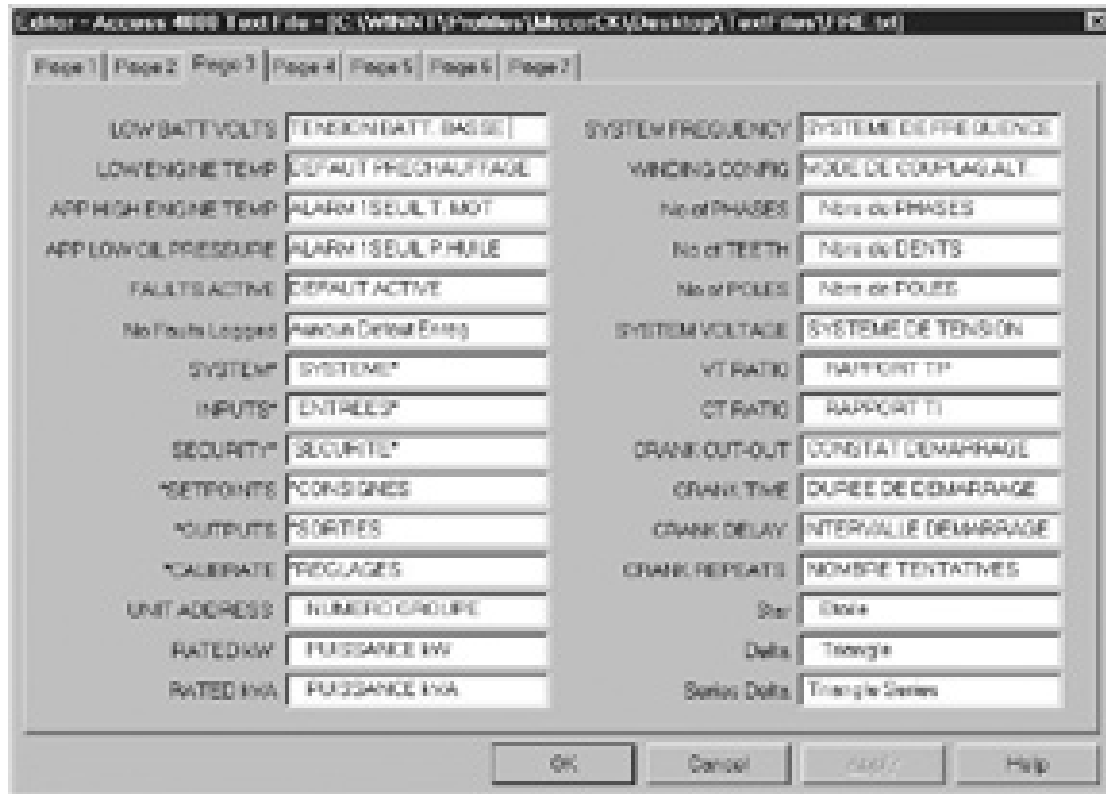
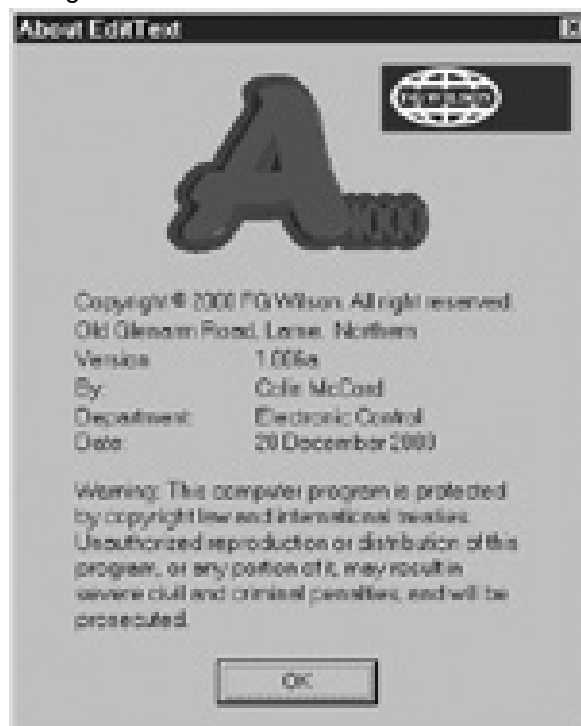


The main use of this program will be in the creation of new languages, at present there are 12. The static labels will always be in English; hence using this as a guild you can translate the text file into any alphabetic based language. A screen shot of the editor with FRE.txt loaded show below: -



Screen shot of 'about' dialog shown below: -



The program is small only 100KB in size, its simple to use, and can easily be modify.

Finished for Christmas holidays, on Thursday 21 December.

Week 23: Tuesday 02/01/2001 to Friday 05/01/2001

Started back on Tuesday 2nd of January 2001, after Christmas and New Year holidays.

Most of my time was spent making additions, modifications and improvement to my Access 4000 database program.

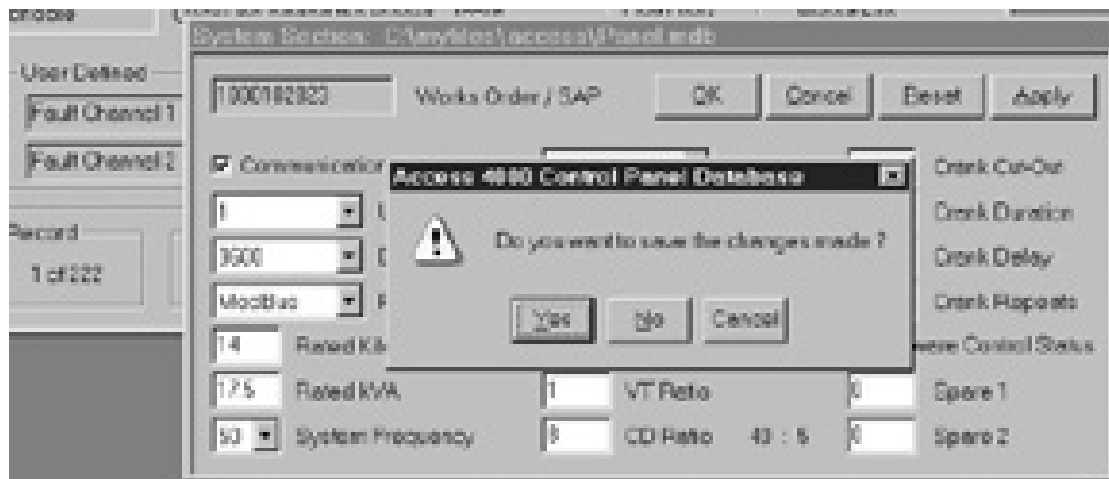
Spend some time making my code more readable, by adding comments, simplifying, and deleting redundant code.

Four popup menus were added: -

- 1) Right click on main control window.
- 2) Right click on Admin tools window.
- 3) Right click on Tool Bar.
- 4) Right click on any configuration window.



Added coded, to check for changes before closing the program, if changes are detected the user will be asked if he/she wants to save the changes, or not.

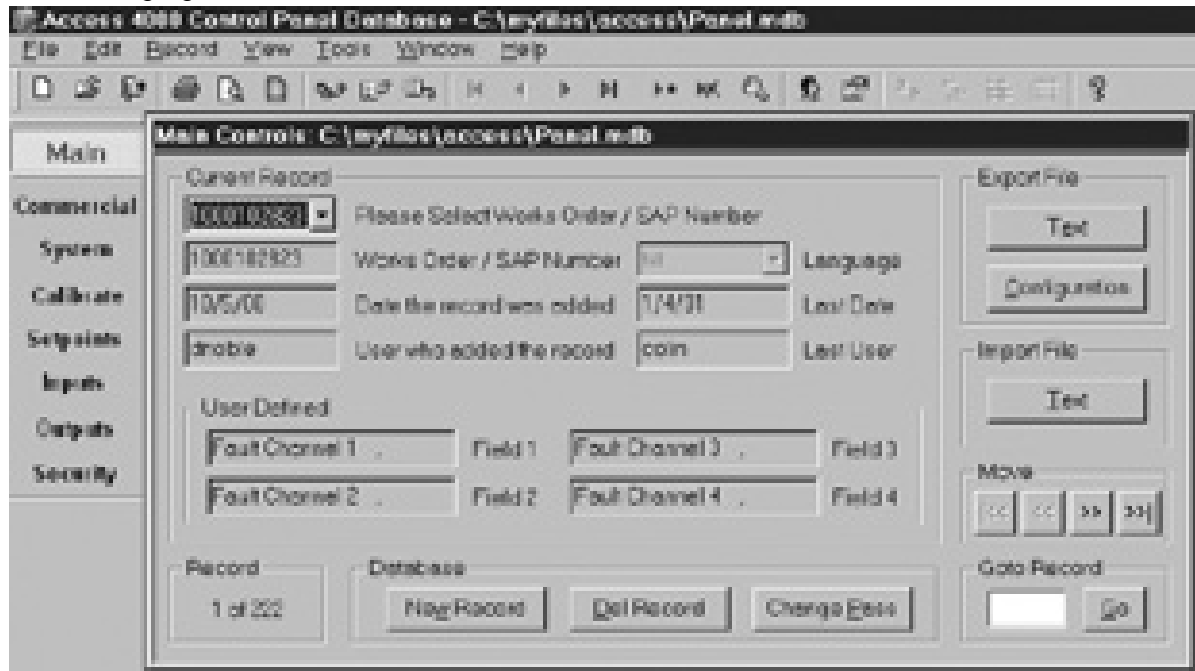


Updated control buttons for loading configuration windows, previously say you click on [System] the system section window will be created, or activated. Well I have now change it so that if the window is already created and is the activated window, it will be destroyed. So we have Create, Activate, then Destroy.

Changed the format of the buttons use for loading the configuration windows, when a configuration window is activated, for example [system] the button system will be highlighted if

user selects or opens a different window the appropriate button will be highlighted. Also if the use clicks on a highlighted button, the window associated with that button is close.

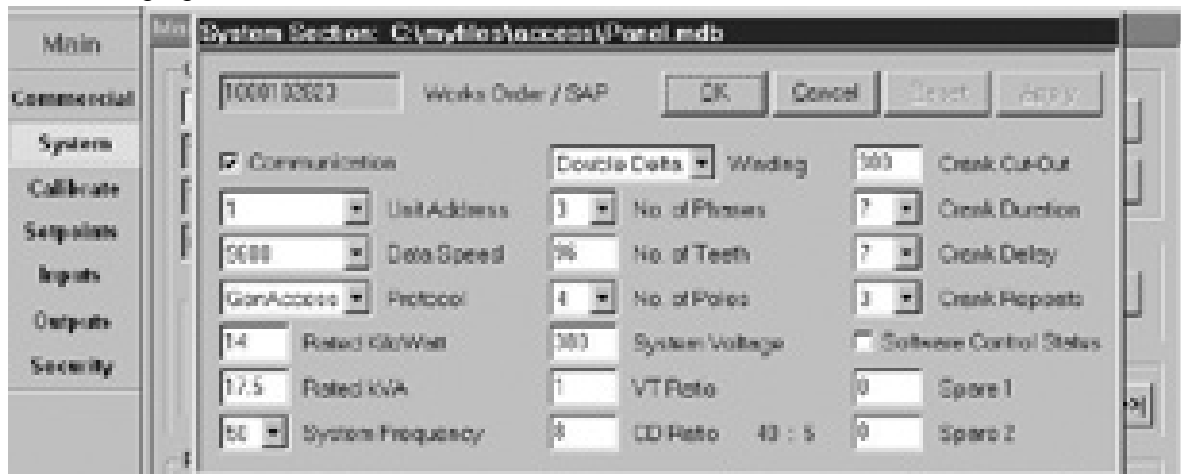
New Highlighted Buttons Screen Shot 1: -



New Highlighted Buttons Screen Shot 2: -



New Highlighted Buttons Screen Shot 3: -



Lots of key shortcuts where added: -

About	Alt+A	Setpoints	F5
Copy	Ctrl+C	Inputs	F6
Close	Alt+C	Outputs	F7
New	Ctrl+N	Security	F8
Open	Ctrl+O	AdminTools	F12
Options	Alt+O	ToolBar	Alt+F1
Print	Ctrl+P	Statusbar	Alt+F2
Print Preview	Ctrl+Alt+P	ConfigToolBar	Alt+F3
PageSetup	Alt+S	Copy	Ctrl+Insert
Print Setup	Ctrl+Alt+S	Add	Alt+Insert
Paste	Ctrl+V	Paste	shift+Insert
Delete Rec	Alt+DELETE	Prev Record	Shift+Left
Last Record	Shift+DOWN	Next Record	Shift+Right
Main	F1	First Record	Shift+Up
Commerical	F2	Cut	Ctrl+X
System	F3	Exit	Alt+X
Calibrate	F4		

Small modifications also made on my Text Editor program and serial number generator program.

Week 24: Monday 08/01/2001 to Friday 12/01/2001

Experimented with and then added owner drawn menus with bitmaps to may Access 4000 control panel database program. The purpose of using this was to mimic the menu style used in Visual C++ 5.0/6.0 and MS Word. This was not easy, but after a couple of different approaches managed to find a way to make it work.

The code was placed into a new Class and can be included into any MFC application, making it easy to add bitmaps to menu items. The code can be reused over and over again.

Window Standard Menu

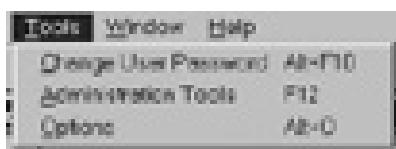


Owner drawn menu with bitmaps



All menus in my Access 4000 control panel database program including popup menus have been replaced with these new owner drawn menus. I think it adds character to the program. Below are screen shots of some of the menus within the program showing the new owner drawn menus: -

Before



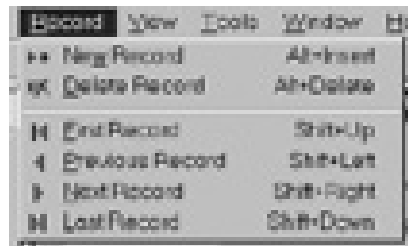
After



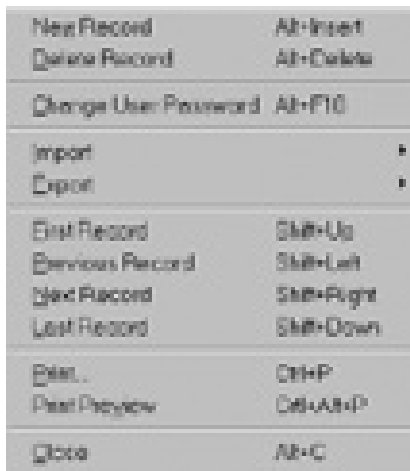
Before



After



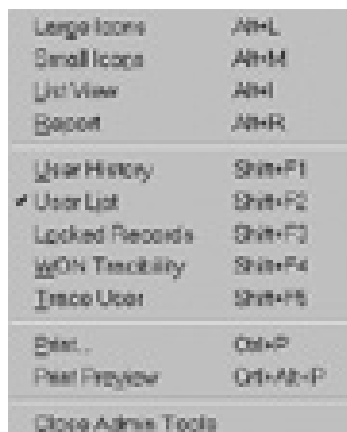
Before



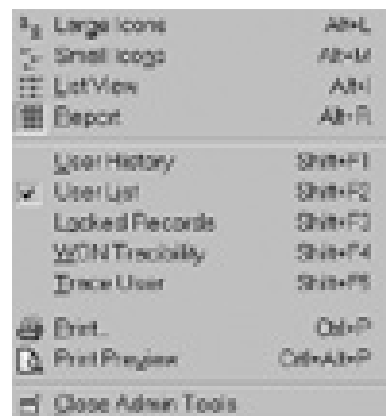
After



Before



After



Before

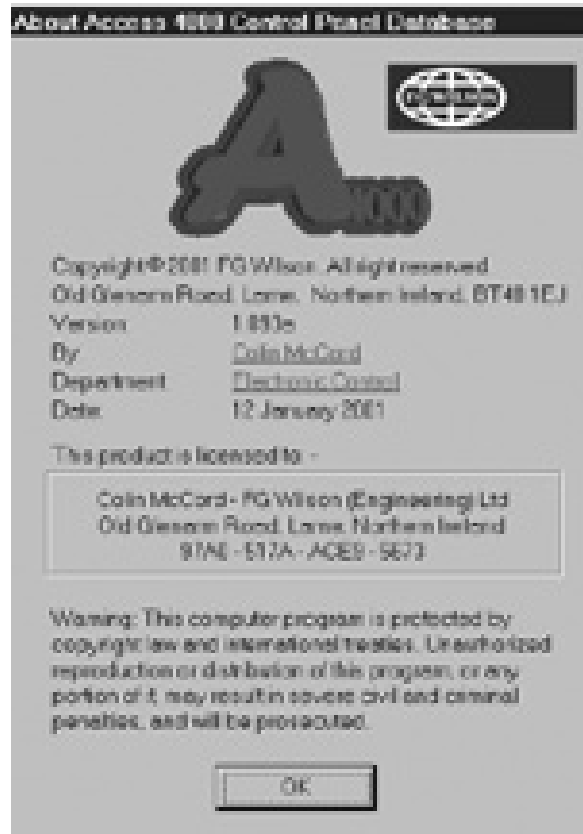


After



Experimented with then added hyperlinks to my Access 4000 control panel database program, again code placed into separate Class which is included using #include. This class allows you to add a hyperlink to any static text box, easily and quickly. Two lines of code are all that is required, once the hyperlink class has been included into any MFC application.

Inside the class is code, to change the colour of the text to blue, underline, and change the mouse pointer to a hand when the mouse hovers over the hyperlink. Screen shot shown below: -



Week 25: Monday 15/01/2001 to Friday 19/01/2001

Tasks for this week: -

- 1) Write a computer program to generate serial number for GenAccess 1.1 control software.
- 2) Create Word document for printing disk labels for GenAccess 1.1 control software.
- 3) Print 50 sets (50 X 3 disks) of labels for GenAccess 1.1 control software.
- 4) To stick labels onto 150 floppy disks.
- 5) Copy GenAccess1.1 control software onto the disks.
- 6) Test all sets by installing GenAccess1.1 control software.
- 7) Write quick start guide on how to operator the generator and print labels.

Screen shot from my Serial Generator for GenAccess 1.1: -

**Generating, saving, and opening serial numbers**

- Click [Generate] to generate a new serial number, this new serial number will be added to the serial list and appear in the SN edit box. The generated serial number is directly related to the current system time & date, with an added 8bit CRC. The edit box 'Next' shows the counter for the next serial number to be generated; this field is incremented automatically after generation of every serial number. The user is permitted to modify the 'Next' edit box (Note. If a serial number all ready exists with the same counter value as the one being generated, the generated serial number will NOT be added to the list).
- Click [Save As] or [Save] to save a generated serial list. [Save As] will always ask the user for a filename, while [Save] will save changes to an existing file or ask the user for a

filename if current list is unsaved. Standard window's 'save' dialogue is used for saving new serial lists.

- Click [O]pen] to load a previously saved serial list, standard window's 'open' dialogue will appear to allow the user to select the file easily. Generated GenAccess1.1 serial lists will have the extension 'gsl' (eg SerialList.gsl), only files of this type will be displayed in the open dialogue making life easier for the user.
- Clicking [N]ew] will clear the serial list. **Warning** program does not check for changes if user has not saved the existing serial list, that list/changes will be lost forever.

Decoding serial numbers

- All serial numbers generated by this program are directly related to the system time & date. So it is possible to decode a serial number, to find out the date & time it was generated. Click [D]ecode SN] to open the decode dialogue show below: -



- Type the serial number that you want to decode into the 'Serial Number' edit box, then click [D]ecode]. The serial number has now been decoded and the edit boxes 'Counter', 'Date' and 'Time' will show the results. Because the serial number contains an 8-bit CRC it is possible to check the serial number is valid, if valid the serial number was properly decoded correctly. If the CRC is invalid the serial number may not be decoded correctly, this will occur if there is a type mistake in serial number or this program did not generate the serial number (e.g. serial number 1 to 200 were not generated with this program and cannot be decoded).

Exporting serial numbers

- First, set the starting position and the number off serials you wish to export. For example if starting position was 201 and number off was 50, serials 201 to 250 will be exported. If the tick box 'All > Starting POS' is ticked, the edit box 'No OFF' will be disabled and all serials after the starting position will be exported.
- Next, type in a filename into the 'Filename' edit box for best result include the extension *.txt. Or click [B]rowse...], which will allow you to enter your path and filename using the window's standard 'save' dialogue.

- Next, Select the format: -

All Fields

Gen. Serial	Counter	Date	Time	Full Serial Number
-----	-----	----	----	-----
201-Q9TWHBBC	201	15/01/2001	11:51:23	GA1-201-Q9TWHBBC
202-Q9TWHBA9	202	15/01/2001	11:51:23	GA1-202-Q9TWHBA9

Serial Only


GA1-201-Q9TWHBBC
GA1-202-Q9TWHBA9

Serial X3

GA1-201-Q9TWHBBC
GA1-201-Q9TWHBBC
GA1-201-Q9TWHBBC
GA1-202-Q9TWHBA9
GA1-202-Q9TWHBA9
GA1-202-Q9TWHBA9

- Next, Click [Export] the file will be created and notepad will load automatically if the extension *.txt was used.

Creating & printing disk labels.

- Load the Microsoft Word document 'GenAccessV2.doc', **note:** the Microsoft Excel spreadsheet 'Data source.xls' should load automatically.
- The document uses a technique known as mail merge. Disk numbers, Serial numbers, and Part numbers are stored in the Microsoft Excel spreadsheet and merged with the word document when printed.
- The document deals with 8 sets (24 disks) at once, using 3 A4 label sheets. Make sure printer is on manual feed, or 3 A4 label sheets have been inserted into the feeder tray.
- Export serials using format 'Serial X3' and No. OFF '8', then cut & paste the serials directly into the Serial number column in the 'Data source.xls' spreadsheet.
- From the word document 'GenAccessV2.doc' click the icon  (Merge to printer). 24 labels should now be printing using the imported serial numbers



How the serial number is generated

The serial number is generated using tables of codes, which are direct related to the date & time of the system, hence the date & time can be decoded at a later date. The codes are letters or number, which I tried to pick a random. These codes are stored in arrays in the computer program hence coding and decoding can easily be achieved.

Serial Number Counter			Month	Year	Date	Min	Hour	Sec	8-Bit CRC	
#	#	#	#	#	#	#	#	#	#	#

Month	Code	Year	Code	Year	Code	Hour	Code	Hour	Code
1	Q	2000	Q	2012	1	0	E	12	G
2	G	2001	9	2013	O	1	M	13	F
3	K	2002	A	2014	P	2	N	14	D
4	U	2003	8	2015	L	3	B	15	S
5	O	2004	Z	2016	M	4	V	16	A
6	P	2005	6	2017	N	5	C	17	P
7	5	2006	W	2018	3	6	X	18	O
8	D	2007	7	2019	2	7	Z	19	I
9	J	2008	S	2020	T	8	L	20	U
10	K	2009	5	Other	0	9	K	21	Y
11	3	2010	X			10	J	22	T
12	6	2011	2			11	H	23	R

Date	Code	Date	Code
1	P	17	C
2	L	18	R
3	M	19	D
4	O	20	X
5	K	21	E
6	N	22	S
7	I	23	Z
8	J	24	W
9	U	25	A
10	H	26	Q
11	B	27	7
12	Y	28	6
13	G	29	8
14	V	30	9
15	T	31	4
16	F		

Min	Code	Min	Code
1-2	Z	33-34	1
3-4	X	35-36	P
5-6	C	37-38	O
7-8	V	39-40	I
9-10	B	41-42	U
11-12	N	43-44	Y
13-14	M	45-46	T
15-16	0	47-48	R
17-18	9	49-50	E
19-20	8	51-52	W
21-22	7	53-54	Q
23-24	6	55-56	L
25-26	5	57-58	K
27-28	4	59-60	J
29-30	3	0	H
31-32	2		

Sec	Code	Sec	Code	Sec	Code	Sec	Code	Sec	Code	Sec	Code
1-2	A	11-12	H	21-22	N	31-32	Z	41-42	W	51-52	U
3-4	S	13-14	J	23-24	B	33-34	2	43-44	E	53-54	I
5-6	D	15-16	K	25-26	V	35-36	4	45-46	R	55-56	O
7-8	F	17-18	L	27-28	C	37-38	6	47-48	T	57-58	P
9-10	G	19-20	M	29-30	X	39-40	Q	49-50	Y	59	8
										0	3

'GA1-' is added to the front of generated serial number. (GA1-###-#####).

I successfully completed and tested 50 Set of GenAccess 1.1 control software, where the serial numbers for each set were created using my serial generation program. Using mail merge the labels were easily printed once the design of the document was complete.

The serial generation program has been written so that it is easy to use, and easy to export the serials into excel and in turn merge with the labels document. 4 page Quick Start Guide has been written explaining in detail how to operate the program, and print the labels.