

DONALD'S DATABASE

PROFESSOR DONALD
TREFUSIS DISCUSSES
DATABASES IN A NEW
REGULAR FEATURE.



I have to admit for certain fondness for databases, in fact one could almost title this fondness as an obsession!

I suppose it was the use of databases that first drew me to Psions. My first Psion, an Organiser II LZ, was basically a mobile database. A place for storing contact information, dates, notes, & other information.

Monitor Equipment

As I progressed with my new Psion I added stock control with the aid of a bar code scanner to record and look after/monitor my students use of equipment and materials.

For me the real value of a computer is the concept of entering vast amounts of information, analysing this data (analysing such data before computers was extremely time consuming, and often impossible) and wielding results of real value.

For example, analysing which product

sold best at what period in the year, thus being able to market that product in a prominent position at that time of the year, increasing sales being the result!

Business Intelligence.

Such analytical processing of data is a basic form of what is now labeled 'Business Intelligence', or B.I. as it is more commonly known. B.I. software commands impressive price tags, and it's Commanders even more so.

One felt that this concept of the database was very much at the heart of the Organiser II. There was (and still is for us current users of the veritable Org II, oh yes it still has its uses) no independent database application, unlike Diary or Calculator for instance.

The database *was* the machine, and pressing a single key tapped you into it, nowadays a single tap would key you into it!

File Handling

Although the Psion Organiser II manual provided excellent instruction in the operation of such machines, I cannot praise highly enough the work of Mike

Shaw in his 1988 book "File-Handling and other programs for the Psion Organiser II" (ISBN 07457-0135-3, however now I would imagine sadly out of print).

This wonderful book demonstrated to me at the time the real power of the Psion machine, and the only way to gain access to this power was through programming.

Cambridge

Of course Cambridge is known as an institute that has turned out many fine computer brains, however at such time I little knew of such programming matters being confined to language studies.

Thus with the aid of Mr.

Shaw's excellent book I began to learn the dark ways!

Series 3

The advent of the Series 3 machines saw the birth of a dedicated database application, unimaginatively labelled 'Data'. The default database opened with a basic contact management file. When saving records on the Series 3 machine I always

enjoyed the concept of the 'Enter Data' command under the 'Change' Tab. The idea of entering your data record into the collective mass that is your database appeals so much more than the modern 'save'.

Microsoft

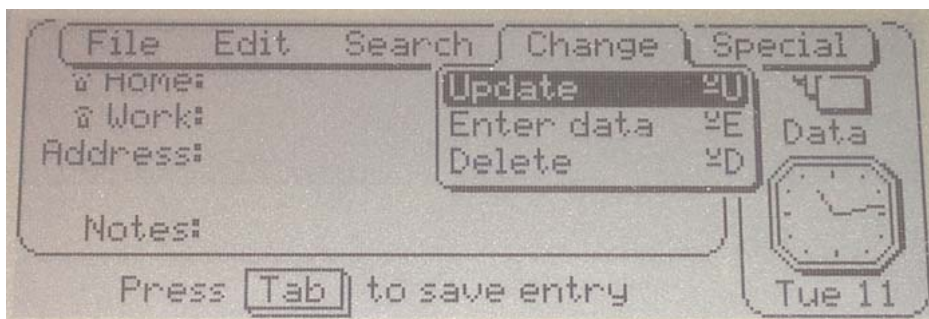
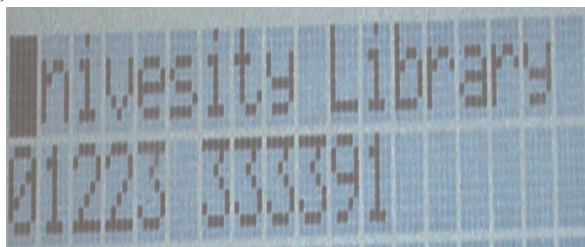
As an aside, Microsoft's global dominance seems to have stripped away so much of the individuality of Operating Systems and Software Platforms. As their power has grown, weaker minds have bent to their ways, creating a dull

and uniform computer world.

I suppose this dull acceptance of the uniform can be addressed

not only to computers, but to all areas of one's existence unless checked.

My own computer habits have avoided Mr. Gates at all costs, instead I have embraced the Penguin [Linux] as my desktop computer and use mainly my Organiser II as mobile 'P.D.A', as I think they are referred to these days.



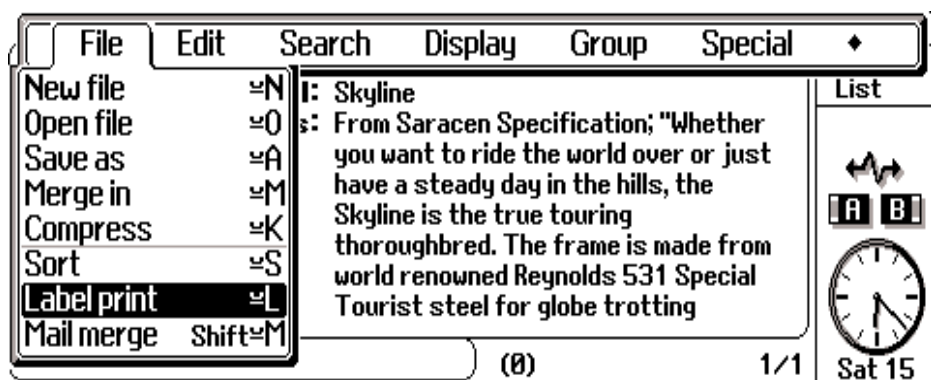


PLATE 1.0

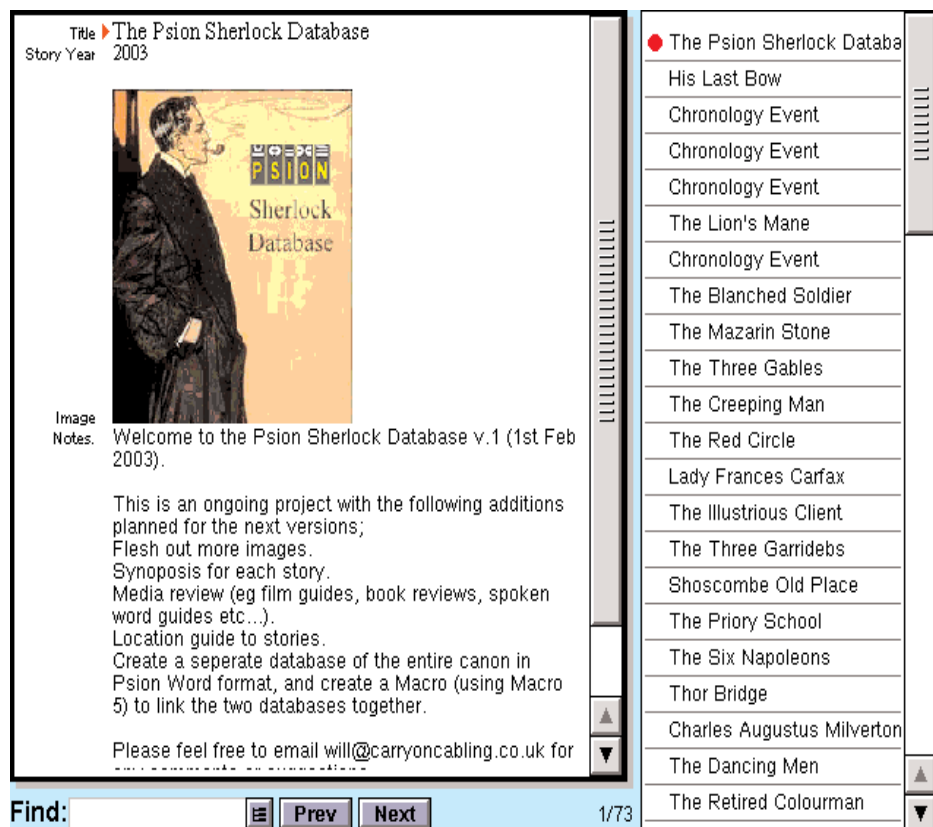


PLATE 2.0

Dr. Potter

I applaud Dr. Potter's efforts against the dark force, although I am informed by the editor of these veritable pages not for long. [This article was written before the public launch of the netBook pro. Please refer to News for more information. Editor]

Dataview Pro

As with all those cursed with an affliction (mine being laziness), I began to work on routes other than programming the new machine to manage my data.

The Series 3 Data application was adequate, but not enough to lure me away from my home-grown Organiser II application.

However with the Series 3a a new database giant emerged, Purple Software's "Dataview Pro".

Dataview Pro has most elements of a fully professional and powerful database application, including both Bar Code reading & (still unavailable on the new 32 bit EPOC platform I believe) excellent label printing.

Date	▶ 10/02/57
Media	Radio
Series	4
Episode	18
Name	Hancock in the Police
Have got?	Yes
Media Reference	BBC Tape

Find: 47/199

Plate 1.0 demonstrated the new and delightful 'G.U.I.' that is Dataview Pro.

EPOCH

Psion's new Operating System labeled EPOC, EPOC being a derivative of 'epoch' as in the noun meaning age, ie a new age.

New Age referring to the move from 16 bit SIBO, to 32 bit EPOC. SIBO meaning, as I understand it, Sixteen Bit Operating [System]. I'm unsure what my Organiser II's 8 bit operating system is referred to, I suppose EIBO would make sense.

OPL User Guide

At this point Psion's excellent 'Data File and Database Handling' section of the OPL user guide published in electronic format became a new beacon.

This section of the the OPL programmers guide explained OPL's database fundamentals. Which existed at this level in the programming code since the early Org II in a more basic form, which is possibly why the database section of the

27/01/57	◀ ▶	Hancock	
06/05/58		View	
08/02/56		New entry	
03/02/57		Edit entry	
13/05/58		▲ ▼	Sun 16 ☰
15/02/56			
● 10/02/57			
20/05/58			
22/02/56			
17/02/57			

PLATE 2.1

Latin			1/1	Room 2a
English	noun	neuter	Epoch English: noun: saeculum neuter: aetas feminine: tempus	File
Epoch	saeculum	aetas		Table
				Add
				Find

Plate 3.0.



Plate 3.1.

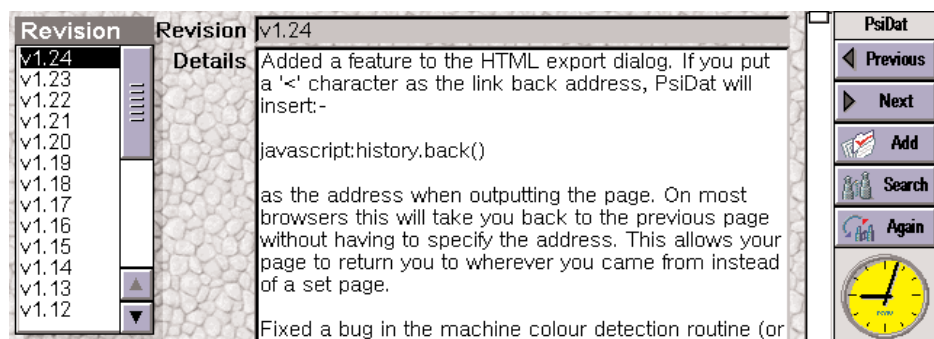


Plate 4.0

Although, I understand OPL's basic style of language still to be a layer above the Operating Systems source code proper, forgive me if this is incorrect, which I think is C+ (answers on a postcard to donald@psioncomputer.com if I'm wrong).

Again this allows you tap into the Psion's database rudiments, and is the basis for Psion's own EPOC 'Data' application, in which Data provides a GUI for some of the basic OPL data functions. See **Plates 2.0 and 2.1**.

I say basic, because we so far have discussed purely 'flat file' databases, rather than 'relational' databases.

The difference being that 'flat file' being like a card index system, with each entry being independent of each other and relational being that each record can share part of its contents with another record from a common record. For instance one 'Company' file can be attached to two 'Employee' files, without the Company details being duplicated.

The raw OPL Database is capable of both relational and flat file uses. Data, as described above uses only the flat file features. To access the relational power of your Psion, you either have to dive into OPL database programming (which allows you to use the database industry standard SQL commands) or use one of



the following applications that have been written by very talented software authors that do the work for you.

Flatfile Applications

Those applications that extend the database features of Psion Data, but are still fundamentally flat file are Small Base and Data-Selector.

Small Base

Small Base (shareware) is a beautifully polished application, with a vast array of features, please note **Plate 3.0**.

Data-Selector

The second DataSelector (freeware) is very much a more user user friendly version of the OPL database, allowing you to apply SQL search criteria. Please refer to **Plate 3.1**.

Relational Applications

Relational database offerings include PsiDat and Purple Software's (now out of business unfortunately, due I think to an odd "card games for PDA's" business strategy, abandoning their database and other products') Powerbase.

PsiDat

PsiDat (freeware) is an amazing bit of software, negating the real need for enduring OPL code. This software gives you all of the Psions database power, with a reasonably friendly interface, although not for database beginners. See **Plate 4.0**.

Powerbase

Powerbase (commercial, but only off eBay etc now) is a massively complex

and professional piece of software. This, unlike the others examples above, does not rely on Psions built in OPL database functions, instead is written in machine code, probably C+ or C++. See **Plate 4.1**.

Introduction!

It may seem I have passed over the software discussed here with undue haste, however this being first in a series of articles on databases it should be viewed as an introduction to the subject.

The table below points to some of the areas the series will cover in the future.

1	The best application for yielding the best results from your data type.
2	Tutorials and example databases for the applications described here.
3	The use of SQL commands to obtain valuable real world results from your data.
4	Exchanging data between PC and Psion.

Until the next time.

Ave et vale!

Prof. Donald Trefusis.
Cambridge College, England.
2nd July 2003.

Please note this article has been re-typed from Professor Trefusis's original hand written notes.

Any spelling or grammatical errors are mine.

Editor.



**An older form of
a database!**

www links.

PrIDat <http://www.millican.info/pridat.htm>

SmallBase <http://www.corisoft-net.com/sb.htm>

Data-selector <http://www.marktevenson.nildram.co.uk/prion.htm>