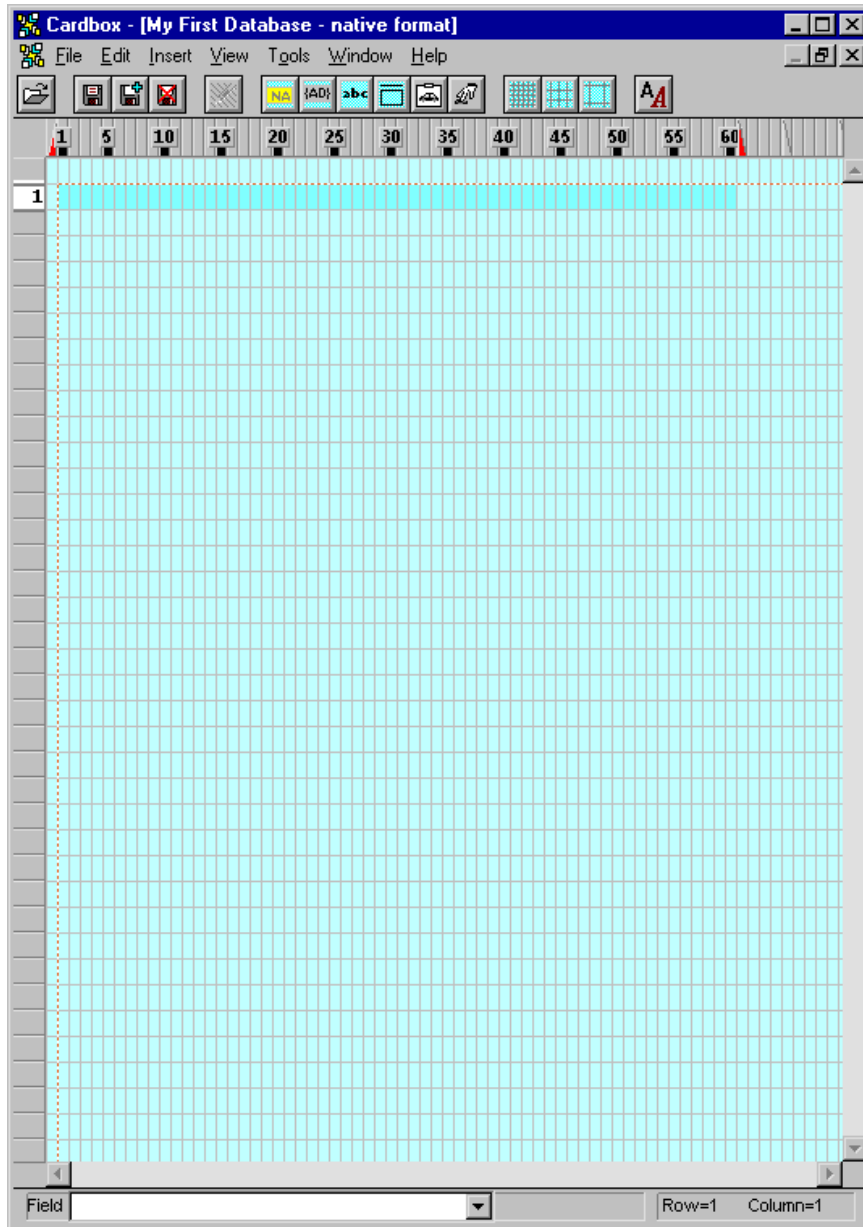


Part Six

Inspiration

A gallery of Cardbox databases; some exercises to help you get started; things to think of when planning a Cardbox database.



A blank screen waiting for you to design your database.

Planning your database design

Cardbox is powerful and it's quick and easy to learn. By now, you know fairly well how to search Cardbox databases and add records to them, and you even know how to design a database – in theory. But it's one thing knowing how to use a tool and quite another thing to know what to use it for. That's what this chapter is all about.

Gallery – We start with a gallery of examples of what other people are using Cardbox for. Even if you have a pretty good idea of what you want to do with Cardbox, it's worth looking through this section, because you may find yourself getting some new ideas. You don't use your word processor for just one purpose, so why restrict yourself to just one use of Cardbox?

Exercises and samples – These are some databases that you can create for yourself with step-by-step instructions from us (but we also give you the final result, if you really haven't got time for this). The databases themselves can be useful as a basis for your own designs, and in any case they'll give you some solid practice and make it easier for you to make a good design first time.

Strategy – Finally we give you some hints on strategy. These will be especially useful if you've used other databases before, because you may need to unlearn some bad habits.

Growing a database

It's often best to start with a really simple database design and have another look at it when you have been using it for a while – perhaps after you've added 100 records, perhaps after you've been using the database for a few months. When you do that sort of audit you'll find new uses for your data and you'll probably find that you need to add a few new fields to help with those uses. Since Cardbox makes it so easy to add fields when you need to, this isn't at all a difficult process, and your database design will end up gradually growing and evolving to suit your needs.

So if an example seems too simple for you, don't worry: you can always create a design and grow it to fit your needs. And if an example seems unnecessarily complex, don't worry either: in your own design, you can prune away the parts you don't need.

Personal uses of Cardbox

The division between personal and business uses of Cardbox is a bit artificial but it's still useful. We think of a "personal" use as being something that you might use for yourself, while a "business" use is more appropriate for groups of people; but since there's no real distinction between the two, there's no reason for you not to adapt one of our "business" examples for your own personal use or expand a "personal" example to cover a whole company.

Addresses and contacts

This is one of the commonest uses of Cardbox, and we even give you two exercises (with accompanying sample formats) that create address books for you – see pages 234 and 235.

Because you design the format yourself, you can easily include whatever extra information you want. You can slant your database towards being a simple address list that you print out for your own use (it saves the worry of losing an address book if you know you can print it out again) or you can make it more sophisticated, so that it can print mailing labels for a mailshot, or categorize your contacts (for example, "printable" friends who get printed in your paper address list and "reference" contacts who have to be looked up on the computer). Here are a few other ideas:

When you're going on holiday, select the friends you might want to send postcards to and print them out in a very compact, small-print format. Tagging (p.93) is an excellent way to identify exactly the people you want to list.

At Christmas, have a couple of fields to record who you're sending cards to and, just as important, who you **have** sent cards to, so that you know what's happening when you look at the database again next year. You can also design a mailing label format so that you don't have to write the addresses by hand.

If you use a Palm, you can use Cardbox to store your address list but then export it to the Palm Desktop application from where it gets synchronized to your Palm. This can work with other palmtops, of course, whether they're PalmOS-based or PocketPC-based; and it can also work very well if you have a company-wide database, since the address list only has to be maintained once.

You can divide your contacts into "printable" ones, who get printed in your address lists, and "reference" ones who have to be looked up on the computer. That way you save paper but don't lose anyone.

If you have a field for email addresses, you can set it up so that a single click on your friend's address will open a blank email, ready to be sent, in your email program.

Collections and inventories

CD collections

You can keep a straightforward record of each CD you have in your collection classifying information according to title; composer; studio, etc.

125	Composer: Schubert	Title: Piano Trio No. 2 in E_Flat D 929	
	Orchestra: soloist: group: Beaux Arts Trio	Philips	1990
173	Composer: Vivaldi	Title: The Four Seasons	
	Orchestra: soloist: group: Nigel Kennedy; English Chamber Orchestra	EMI	1989
376	Composer: Schumann	Title: Symphony No. 3 op. 97	
	Orchestra: soloist: group: Chicago Symphony Orchestra	Deutsche Grammophon	1977

You can build on this by having a bigger field that holds the track listing for each CD. If you index this, then you will be able to search easily on tracks as well as whole CDs.

One Cardbox user has a large database of tracks that he uses to create playlists for a radio programme. He then archives the playlists, so that it's easy to look up what was played in the past, and he also uses Cardbox to create a Web page with the most recent playlist for everyone to see.

Book collections

This is a classic use of Cardbox: the first ever (8-bit) edition of Cardbox, in 1982, had a Books database as its main sample. Here, in honour of that edition, is the very first record:

Author:Mark Girouard	
Illustrator:	Language:
Title:Life in the English Country House	
Publisher:Yale U.P.	Date:1978
Subjects:Society, architecture, history, England, country-houses.	

Here, from the 21st century, is another example, developed by an historian. You'll note that the price has been included. This is so that if her house burns down, the insurance company can receive a complete list of the books and how much they will cost to replace.

Title:Rising '44	
Author:N. Davies	
Pub:Macmillan	Date:2003
Type:Hard new	Cost:25.00
1550	
Class:History. Military	Where:

A logical extension of a database like this would be to add a shelfmark so that you can see where each book is. Of course, this requires quite an investment in time and effort, because the database will have to be edited every time a book is re-shelved: perhaps this would be more suitable for an academic library with a librarian, rather than a personal working library.

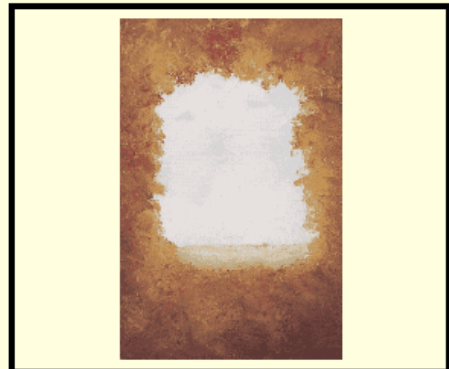
One final visit to books, this time from the point of view of a business. The Electric Chariot is a Web-based motoring bookshop that was active in the early days of the Internet. A customised program built the actual Web pages, but the core of the data was stored in Cardbox:

Author: Upietz	Title: WORLD SPORTSCAR RACING 1994	Price: 34.95
Description: A review of 1994 with the cooperation of Eurosport TV.		2/3/98 88
Code:	Catalogue pages: motorsport_formula_racing	Picture:
Author: Craft	Title: ANATOMY & DEVELOPMENT OF THE STOCK CAR	Price: 17.95
Description: A well illustrated book that describes the history of Stock Car Racing and the development of technology within it. There are detailed		89
Code:	Catalogue pages: technical_competition	Picture:
Author: Hewett/Brown	Title: MONACO GP: PORTRAIT OF A PAGEANT	Price: 14.95
Description: A well produced A4 format book covering the history of the famous race around the streets of the principality.		90
Code:	Catalogue pages: motorsport_formula_racing	Picture:

Insurance inventories


Once you have become convinced of the necessity of giving evidence to insurers, there is no need to stop at printed books. Any artefact is worth recording, and with digital cameras being so cheap, there is no reason not to photograph everything while you're about it:

064 0052654C
 AR:August Strindberg
 OE:The yellow autumn picture
 ME:oil on canvas
 SI:54 x 35 cm
 DA:signed 1901
 TY:landscape



Recipes

When we heard that a prominent Oxford philosopher was a keen user of Cardbox we thought we could dazzle everyone by raising the intellectual tone of this book. However, Oxford philosophers turn out to have human interests too; and he is not the only one. The following example comes from an agricultural institute in Chile whose main “business” databases are bibliographies related to crop management and animal husbandry:

Entrada_de_lechuga_con_camarones_a_la_crema	Entrada - mariscos
6 personas Tiempo de preparación aprox.: 20 min 1 lechuga grande lavada y cortada en trozos grandes 1/2 kg de colitas de camarones 6 cucharadas colmadas de crema (160g, 3/4 tarro grande) 1 cucharada de whisky o pisco 2 cucharadas colmadas de mayonesa 2 cucharadas de ketchup Sal, pimienta 1. Cueza las colitas de camarones en agua hirviendo, 3 a 4 minutos y pélelas. 2. Mezcle la crema nestle con la mayonesa, el licor y el ketchup. Sazone con sal y pimienta. 3. Mezcle la lechuga con los camarones y bañe con la salsa en el momento de servir.	

One of the glories of Cardbox is how infectious it is: you start using it for one main purpose and then you discover others, and still others...

Bibliographies

One of the most irritating tasks that any academic researcher faces is maintaining a list of references. It's irritating because it's a distraction from the main job but it still has to be done right. There is nothing that terrifies a Ph.D student more than finding an absolutely crucial quotation in the finished thesis but having no idea at all where it came from.

W.S. Hamer	The British Army, Civil-Military Relations	Oxford	1970
Ian Hamilton	Listening for the Drums	London	1944
G. McCourt	Remember Butler	London	1967
D. R. Morris	The Washing of the Spears	New York	1965
A. Preston ed.	In Relief of Gordon	London	1967
L. Strachey	Eminent Victorians	London	1918

Cardbox is so flexible that you can create one database of books and articles and divide them into primary and secondary sources and then create an alphabetical list that can then be read into a word processing package and edited further.

Abstracts

Researchers also use Cardbox to keep databases of abstracts. There are two main approaches. One is to store everything in the main record, and have a big field for the abstract with the keywords indexed; the other (shown here) is to have all the reference information in the main record and the abstract itself in the Extra Text field.

Authors: Zulian_M, Bellone_J, DeBoon_G.W.	Source: J-Am-Dent-Assoc 1987 Jan. V 79-80, ISSN: 0002-8177.
Title: Multiple linear ulcers on the dorsum of the tongue in a patient with Waldenstrom's macroglobulinemia.	Address: Oral and Maxillofacial Sur Medical Center, Kansas City, MO.
Journal/Book: J_Am_Dent_Assoc	
Year: 1987 Volume: 114 First page: 79 Last page: 80	
Number: 07110257 References: Book: 2010	
Keywords: case_report diagnosis_differential eosinophilia_MJ_pa human macroglobulinemia_MJ_pa male middle_age tongue_diseases_MJ_pa ulcer_pa	
Abstract: author directly	
An unusual clinical presentation of an eosinophilic ulcer of the tongue has been described. This lesion is seen most often in the fourth to sixth decades of life and has been shown to have a strong predilection for males. The etiology is unknown although trauma has been implicated by several investigators. Because of the clinical	

You can view the abstract together with the main record (as here) or in a screen on its own. There is nothing to stop you building on this further: for example, by adding a field that gives your own opinion of the article.

Quite a few researchers download abstracts from online databases such as Medline, because many of them allow the export of data in a form very close to Cardbox's External file transfer format.

Passwords

People who live online rapidly realise that they are accumulating an uncontrollable number of different identities for different sites and services. Unless you use the same user name and password for everything (a very dangerous thing to do from the point of view of security) you end up with total chaos. A simple Cardbox database with just a handful of fields will solve the problem:

http://www.businesslink.co.uk Email used: mike@hotmail.com Other info: Memorable word: Tanzania	User name: Michael Password: X5J9LP
http://www.amazon.co.uk Email used: kate@aol.com Other info:	User name: Katherine Password: VE4asJ7
http://www.northernrock.co.uk Email used: sarahc@hotmail.com Other info: Maiden name: Davies First school: St Mary's	User name: Sarah Password: BYRWKOPS

You'll have to protect your password database, of course. In some cases you may be able to rely on physical security, by controlling access to your computer and taking great care of any backups you make. Otherwise you can encrypt your database if you have the Professional Edition of Cardbox. Failing that, you'll have to see what encryption and security features are built into your copy of Windows.

Photographs

Cardbox is perfect for cataloguing and storing photographs – either direct digital snaps or scans of printed photographs. One Cardbox user (most of whose databases are for trade statistics, journal ordering, library lending, and other serious purposes) also has a personal copy of Cardbox at home, and reports:

“Taking advantage of the beautiful weather we are having today I have been photographing some of the plants in my garden in order to have real live photos in my plant database, trying to eliminate those scanned from the labels that came with the plants...

“As for my own photos, I have a macro that imports them from a Photo CD and another one that automates writing out any combination of photos in the correct order to a folder that already contains Slide Show files. The macro finishes by opening Roxio CD Creator. Now I don't mind when people ask me for copies of my photos and it won't be a chore to load them in the first place. My cousins will be pleased”.

Obviously you need the Professional Edition to use Cardbox macros to do all this work; but it shows what can be done with macros even by someone who is not a professional programmer and has never written a program before.

The exercise on page 238 shows you how to create your own database of photographs using Cardbox.

Daybook

If you have a scanner then you can implement a daybook using Cardbox. A daybook acts as a central file for all the correspondence you receive. You can categorise the letters and give them keywords for indexing and retrieval. The original paper can be stored in a box file somewhere, in case you ever need it as proof of something; but for ordinary use the Cardbox database will be far easier to search in, and you can always print out a copy of anything that you need.

22/9/2003	105	From William Watkins	Trusts	
Discussion of forthcoming meeting.				
30/6/2003	107	From John Simler	Accounts	
Covering letter for 2002/03 garden committee annual report.				
22/10/2003	109	From Vehicle & General	Insurance	
Car insurance acknowledgement				

This is such a useful application of Cardbox that we give you an exercise that creates a simple daybook for you: see page 237. You can store your important legal documents like this as well – leases and share certificates – so that you have a backup copy in case anything is ever lost or destroyed.

Other uses

Here are a few other personal uses of Cardbox that we've heard of. There are sure to be many more:

Bird watching	Trainspotting	Family history	Christmas cards
Concert programmes	Photographs	Videos & DVDs	Newspaper cuttings

Remember that there's no hard-and-fast distinction between personal and business uses of Cardbox, so even if you're an individual who's using Cardbox, carry on reading: there may be something in the Business section that inspires you.

Business uses of Cardbox

There are as many different business uses of Cardbox as there are businesses. There's no way we can illustrate all of the possible applications of Cardbox, so we'll concentrate on some of the commonest ones. If none of them is an absolutely perfect fit, you can easily design your own.

Customer relationship management

At the simplest level, Cardbox can be used to maintain a database of names and addresses. Mailing labels can then be created for mail shots. However, many of our users have built more sophisticated customer relationship management applications using Cardbox. We've heard of databases of almost a million records, with customers categorized by their fields of interest and their assigned sales staff. Here, on a less epic scale, is the sample Contacts database that we distribute with Cardbox:

1 Name: Ms E. Bacon Position: Org'sation: Hopkins Bookshop Address: 37 Lower Market Street Swansea	Date: 13/7/2003 By: ALC Ref: 389 Last contact: 3/8/2003 Next contact: 25/10/2003 Sales Rep.: Glenys Jones
County: West Glamorgan Area: WA Postcode: SA1 0LK MailCode: 1 Country:	Products of interest: DATABASE How heard of products: Word Name:
Business: Retail: Bookshop	Tel: 01792 261955 Fax:
Dear: Ms Bacon	Transferred to: Active 22/7/2003
Contacts history:	

This database design contains enough information to identify who added the customer; what the customer's interests are; who is responsible for ongoing relationships; when the last contact was and when the next contact should be. The "Contacts History" field can contain a narrative of contacts so far, and because Cardbox lets you index as many words as you like, you can index the date of each successive contact and thus answer, very simply, questions such as "who did Gary talk to in the last week of October"?

Obvious additions to this database include an email address, which can be used for direct contact or (using the Professional Edition) can be used with macros to send bulk emails – just as the fax number can be used to send bulk faxes.

Invoices

Cardbox is not an accountancy package. Nevertheless, it is often used for invoicing and account management, because most of what gets classified as “accountancy” is in fact database management, and Cardbox is such a flexible database.

Date	Invoice	Net	VAT	Total	Paid	Name	VAT	Control
2/4/2003	12345	6529.45	1142.65	7672.10	17/5/2003	ABC Publishing	1/03	Cheque

There are two main ways in which you can use Cardbox for things like invoices. One is to keep all the necessary information in the Cardbox database and then use mail-merging to generate the actual printed invoice. The other way is what we have shown here, where the invoice itself is stored in a separate word-processing file and Cardbox simply does all the indexing and summarising. Here are some of the questions that can be answered by a Cardbox database of this kind:

To calculate a total for all records in the current selection: hold down the right mouse button over your chosen field, and when the menu appears, select “Total”.

- Have we dealt with these people before? What is their payment history?
- When was invoice 99999 issued? What was it for? Has it been paid?
- Which invoices were issued last February?
- Which invoices have not been paid for over 30 days?
- What is our total turnover in the last VAT quarter?
- How much of our revenue has been paid by cheque and how much by credit card? Of the credit card revenue, how much was paid directly and how much through our web site?

You can set up macros that will open the text of an invoice by clicking on a button next to the record; and you can perform processes including the checking of bank statements either manually or by running a suitable macro.

Finally, you can export the data from Cardbox and produce a report suitable for passing to your accountants.

Time-critical situations

Because its search engine is so fast, Cardbox is used for telephone help lines and support centres.

Policy no: 137490	Renewal date: 12/12/2004	Call taken by: FC
Name: Christopher Dawes	Salutation: Mr Dawes	Date: 23/4/2004
Address: CRD Business Publishing Unit 5 Ridgeway Business Park Brighton	Tel: 01273 611182	Time: 10:47am
Postcode: BN1 2WC	Fax: 01273 611185	Length: 7 (mins)
Category of enquiry: <input type="radio"/> New <input type="radio"/> Renewal <input checked="" type="radio"/> Claim		Go to email screen 
Type of insurance <input type="checkbox"/> Car <input type="checkbox"/> House <input type="checkbox"/> Contents <input type="checkbox"/> House & contents <input type="checkbox"/> Pet <input checked="" type="checkbox"/> Business <input type="checkbox"/> Employer's liability <input type="checkbox"/> Professional indemnity <input type="checkbox"/> Key person <input type="checkbox"/> Other		Status <input checked="" type="radio"/> Resolved <input type="radio"/> Referral <input type="radio"/> Waiting for customer <input type="radio"/> Other
Enquiry Needs a claim form following a small fire at premises.	Resolution Claim form sent 24/4/2004	

For example, Cardbox is used at a chemical plant: when an accident occurs, Cardbox is used to identify the type of accident, to look up the first measures to control the situation, which people must be contacted, the severity of the alert and the probable risks. The user tells us

“Cardbox is excellent in situations where seconds count”.

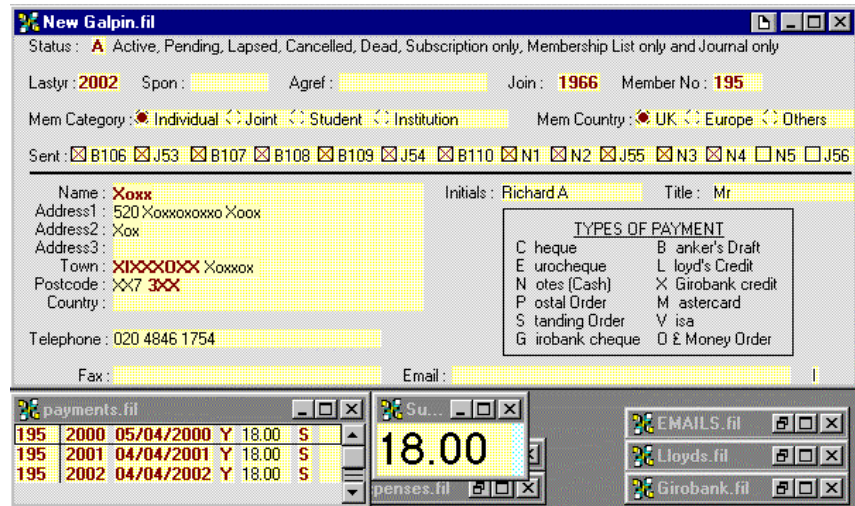
A poisons information bureau has used Cardbox to collate poisoning reports from doctors and the general public: collating the resulting information has led to such simple risk-reducing actions as changing the shape of the bottles used for surgical spirit (denatured alcohol) as well as discoveries that can lead to better focused public education: for example, that among teenagers poisoned by plant substances, there are significant sex-linked differences in the type of substance encountered.

Airline safety managers use Cardbox to record and exchange data on safety-related incidents on a confidential and anonymous basis as part of their quality assurance process.

Girls: morning glory seeds.
Boys: magic mushrooms.

Membership databases

The Galpin Society's membership system is an excellent example of several Cardbox databases being used together. The main database lists members and the ways of contacting them, their current membership status and the publications they have received. An auxiliary database identifies all payments on a member's account.

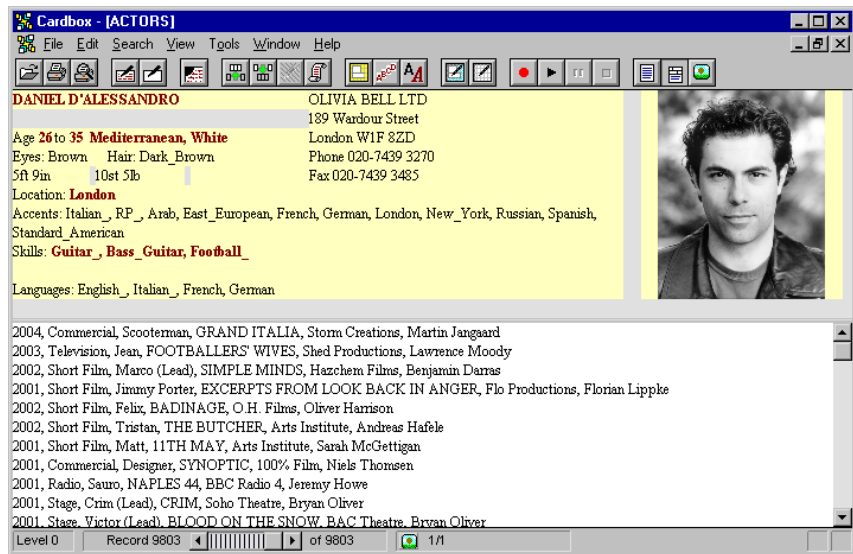


You can read all about relational linking in Help Point 500.

This application makes extensive use of relational linking: when you move from one record to the next in the main database, the Payments and Subscription windows update themselves to match the new record.

Actors and casting

A casting director had a problem. He needed to cast actors for a play, but the market leading database of actors was virtually unusable. Not only did it demand that searches be put into a rigid and inflexible search form: it was also then incredibly slow in its searching. (To be fair, we should say that several years have passed and we are sure that the publishers have now greatly improved their offering). So we converted the main Actors database into Cardbox for him.



The 9,800 actors could now be searched instantly (the database, with pictures, was only 97MB), and the user could assess at once how many actors remained and whether he was making his search too vague or too specific. "Contact sheets" of photographs could be printed out so that the production company could compare pictures of 24 actors at a time. Extra Text was used for the CVs, which could vary widely in length.

"Before Cardbox, we were peering through a keyhole and we never knew what we might be missing. With the Cardbox database, we had the whole landscape in front of us and we could select, assess, and compare actors as much as we wanted. For the first time we were in full control of the casting process".

Scientific research

Numerous research agencies use Cardbox. For example, Bangor University undertook some research into Indian crop cultivars.

“We chose Cardbox for its simplicity and user-friendliness and because its use is very intuitive. Development practitioners in KRIBHCO and other organisations who are not information specialists will be involved in keeping the database updated and will answer queries. A day's training programme is usually sufficient to enable users to design new databases and formats, conduct complex searches and print out records. The database is being distributed on CD-ROM with an automatic installation procedure”.

RELEASE DATA AND BACKGROUND INFORMATION		
Variety name adopted or proposed:	Amulya	
All known names of the variety:	Amulya, IET-8989, NC-493	
Sub-species	indica	
Sponsored by:	RRS_CH	
Institution at which developed:	RRS_CH	
Parentage & pedigree:	Pure line selection from a local_tall_indica cultivar (Nagani)	
Varieties it replaces:		
Breeding method:	Pureline selection	
Breeding objective(s):		
Similar varieties		
Nat. cat. no.:	Notification (SO) number	Date of notification
318	915(E)	'06/11/89
Year of release	Status	Date of Denotification
1988 / 1989		

Academics are experts in their own discipline but not usually computer experts. With Cardbox it's easy for them to set up databases that can be searched by other academics who are active in the same field, without having to get any computer departments involved.

Security

Many police forces and defence services worldwide use Cardbox. Department stores have used Cardbox to record details of shoplifters, which are then shared among local shops. Here are some other security applications we've heard about:

Accident investigations	Domestic violence	Research into stop and search policies
Aliens register	Emergency control room	Security passes
Burglar alarms	Evidence gathering	Stolen art and antiques
Child abuse	Fraud investigation	Stolen vehicles
Crime pattern analysis	Keyholders	

Law

Apart from the obvious uses in criminal cases, legal firms also use Cardbox to maintain their case records, libraries, and registers of wills, codicils and deeds.

One of the barristers who use Cardbox maintains a record of work done in relation to every case, indexed by the client's name, a case reference number, and the date any work was done.

"Setting up a record for each case enables me, with minimal effort, to keep an eye on progress with current work, and provides me with easy access to a wealth of information about completed cases. For example, I can easily check how many pieces of work have been done for each client, the expert witnesses I have worked with, the judge I appeared before, and when I last did a case concerning a specific area of law. It also tracks payments for each case, as a cross-check on the central Chambers system."

Medicine

Apart from the academic uses of Cardbox in medical research, it has wider uses in hospitals and medical practices. Here are some of them:

Clinical audits	Kidney transplant databases
Court cases needing expert witness declarations	Patient records
Drug registration	Publishing health information
	Sexual health

The security features we have built into Cardbox are particularly important in a medical context. One British hospital takes privacy a step further: the Cardbox database used for the psychiatric records of its own staff exists on only one computer, and that computer is kept in a locked room and deliberately not connected to the rest of the hospital's network.

Museums

Acquisitions

Not the least problem facing museums that build massive archives is tracking the source of the items in their collections. Here is the Cardbox solution, which makes it easy to search for particular classes of material, identify what each collection contains, and even contact the original donors if necessary.

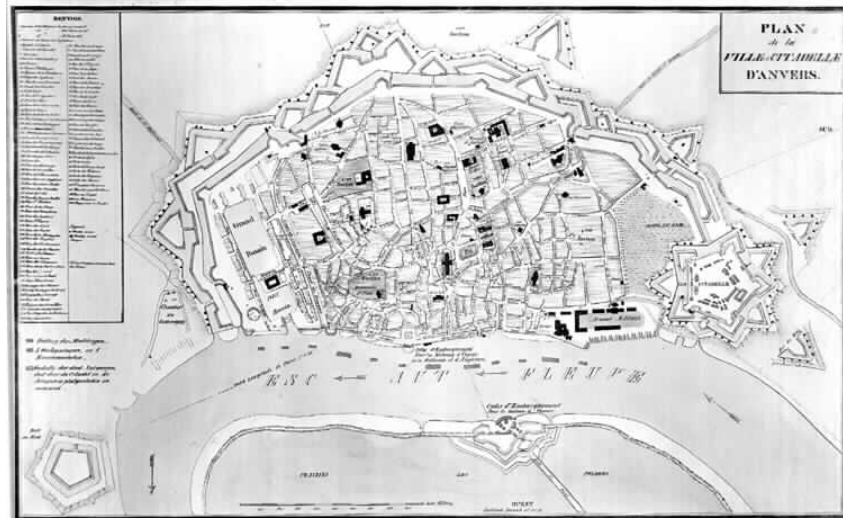
Date	Acc. No	Source	Description
24/06/2002	2002-VI/1	Mrs XX Xoox 4 Xoooooooo Xox XOXOXOXO Xoooooo XX8 3XO	22 programmes London 1936-61 incl. QH 21/4/1936 (Bustabo), RAH 29/9/1948 (R Strauss) & 2/10/1949 (Gigli)
<input checked="" type="radio"/> Gift <input type="radio"/> Purchase <input type="radio"/> Transfer Acknowledged <input type="checkbox"/>		<input type="checkbox"/> Books <input type="checkbox"/> Cuttings <input type="checkbox"/> Ephemera <input type="checkbox"/> Illustrated Title Pages <input type="checkbox"/> Manuscripts <input type="checkbox"/> Originals <input type="checkbox"/> Periodicals <input type="checkbox"/> Photographs <input type="checkbox"/> Printed Material <input type="checkbox"/> Prints <input checked="" type="checkbox"/> Programmes	
23/08/2002	2002-VIII/2	Mr Oxxxx Xooxx XXox 7 Xoox Xooxx 77 Oxxxx Xoooooooo Xoox Xooxx X8 OXX	A collection of programmes, cuttings, books and opera periodicals including ROH (6 1870-87, c. 450 modern), QH (17, some fragmentary), St J's H (15, some fragmentary), RAH (3 1895-98), Grosvenor Gallery (28/6/1882), SWT (146), WH (29/3/1938), smoking concerts (30) & much provincial & foreign opera
<input checked="" type="radio"/> Gift <input type="radio"/> Purchase <input type="radio"/> Transfer Acknowledged <input type="checkbox"/>		<input checked="" type="checkbox"/> Books <input checked="" type="checkbox"/> Cuttings <input type="checkbox"/> Ephemera <input type="checkbox"/> Illustrated Title Pages <input type="checkbox"/> Manuscripts <input type="checkbox"/> Originals <input checked="" type="checkbox"/> Periodicals <input type="checkbox"/> Photographs <input type="checkbox"/> Printed Material <input type="checkbox"/> Prints <input checked="" type="checkbox"/> Programmes	
04/08/2002	2002-VIII/1	Mrs Xooxo Xoox 20 Xoooooooo Xoox XOXOXO X13 9XX	Five photographs of Paul Robeson, Mrs PR (1, one as the Emperor Jones) & PR junior all inscribed to Mr & Mrs Hiawatha Coleridge-Taylor, together with a hand-made 'calendar' for 1929 with further photographs of PR (1) and his family (6)
<input checked="" type="radio"/> Gift <input type="radio"/> Purchase <input type="radio"/> Transfer Acknowledged <input type="checkbox"/>		<input type="checkbox"/> Books <input type="checkbox"/> Cuttings <input type="checkbox"/> Ephemera <input type="checkbox"/> Illustrated Title Pages <input type="checkbox"/> Manuscripts <input type="checkbox"/> Originals <input type="checkbox"/> Periodicals <input checked="" type="checkbox"/> Photographs <input type="checkbox"/> Printed Material <input type="checkbox"/> Prints <input type="checkbox"/> Programmes	

Catalogues

Museums are increasingly building online catalogues of their collections, and some of them are already accessible across the Internet using Cardbox.

Help Point 579 lists Cardbox databases that are publicly available across the Internet.

De Atlas Van Stolk ("the Van Stolk Collection") is an important Dutch collection of historical prints and drawings. The collection is housed by the Rotterdam Historical Museum, which maintains several databases including one of political cartoons and one of prints and drawings. These contain full accession details and scanned images of the items in the collection:



www.hmr.rotterdam.nl

The Thackray Medical Museum does the same thing with one of its collections: see page 2 for an illustration.

Administration

The Rotterdam Historical Museum reports that apart from maintaining large image databases, Cardbox is also being used by the librarian for the library catalogue, the secretary to record correspondence, and the curators whenever they are setting up a new exhibition. Once you start using Cardbox there is no reason ever to stop!

Libraries

You've already seen some uses of Cardbox that fit well in libraries – books (p.216) and other collections (p.230) – but of course there is a lot more to libraries than just catalogues. Here are a few of the other things that librarians use Cardbox for:

- Circulation
- Inter-library loans
- Orders and payments
- Photocopies and copyright restriction management
- Periodicals management

Below, you'll see a sample record from a periodicals management database that lets the librarian keep track of subscription status and whether all the required issues of a periodical have arrived. It generates automatic claims for missing issues, which was formerly an onerous part of the librarian's work.

The Cardbox user who sent us this example has also set up other databases and tied them together with a macro that daily checks all databases for late orders, late loans, missing periodical issues etc, and generates for each staff member a list of their outstanding queries.

Abbreviation: RE
Location: HQ-L

F6 to go to DISP format

Title [ti]: **RURAL EUROPE: Agri-environment and rural development policy.**

Frequency [fq]: Monthly J

Next due (du): **CtrlShift+letter in Freq. field** 21/6/2004

Number of latest issue received (lis): 14

Volume of latest issue received (lvl):

Date of latest issue (ldt):

Month of latest issue (lmm): 5

Year of latest issue (lyr): 2004

SS-Subscription Newspaper-Supplier
 P-Pembroke C-Complimentary
 CD-Cancelled CD-Ceased

To Save
Periodicals: **Ctrl+4 (Number pad)**
Statistics: **Ctrl+5**

F7 to transfer details to extra text

Overdue (lt):

Circulation list (cl): y Date of latest claim (cm): Number of copies (nc):

Claimed to date, but not received (cltd):

Ctrl F3 to print circulation lists - will print all 6 lists, and gives an option to halt if less than 5. (CtrlF7 to print single circ list if required out of 1-6 sequence)

1 xxxxx xxxxxxx, Structural Funds 4C	2	3
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Cardbox for everything

Frensham: secondary girls' boarding school catering for 300 girls.

www.frensham.nsw.edu.au

Gib Gate: co-ed primary school catering for about 250 from preschool to year 6.

www.gibgate.nsw.edu.au

Sturt: craft centre educating to tertiary level and including a shop and café.

www.sturt.nsw.edu.au

Once people get Cardbox for one purpose, they find more and more uses for it. Here is an extreme example. Winifred West Schools Ltd is an Australian company that runs three educational facilities in New South Wales. John Huskisson is the Property Manager responsible for all buildings, grounds and related infrastructure. He first came across Cardbox when he used it in the British Army to run the subscriptions database for an in-house newsletter.

Here is a summary of the Cardbox databases that are being used to help run this organisation:

Jobs – property management: a record of all maintenance jobs done since 1996. About 26,000 records.

Indent – an online database of job requests. Accessed by all staff across three campuses: records are then transferred to Jobs and allocated to work teams.

Phonebook – corporate address, phone, email, and Web directory.

Phonecalls – record of all external phone calls made. Downloaded from the exchange as a text file, converted by WordPerfect and then loaded into Cardbox. Calculates cost of calls and prints bills using information from Authority Codes.

Authority Codes – PIN numbers for the phone system and security system. Checks for duplicate PINs, generates issue letters to notify PINs to users.

Stored Calls – archive of all calls made from the exchange (about 500,000 records).

Paint – register of all colours used in all buildings, including paint codes and formulae and where the paint was applied.

Chemicals – register of all chemicals held, with macros to calculate gross holdings.

Keys – register of the current master key system (1,500 records).

Meters – list of all gas, water and electricity meters.

Email – allocates usernames and passwords to all new students and staff, and issues notification letters accordingly.

School Reports – teacher entry formats and final report formats for the primary school.

Trees – register of all trees on the campus: condition, work required, etc.

Work Done Album – photographic records of all work done (eg. underground computer network cabling), linked to Autosketch plans.

Warranties – register of purchases with warranty details and photographs.

Other business uses of Cardbox

Advertisers' details	Housing benefit case management	Project management
Aerial images	Information databases	Property database
Alumni	Inventories	Property management
Architectural references	Job sheets	Purchase ordering system
Artists	Legislation databases	Quality control
Assets registers	Local history records	Questionnaire analysis
Building maintenance records	Local information	References
Burial registers	Local business support databases	Regimental associations
Calibration records	Logging hardware and software faults	Safety checks data
Car pass management	Logistics	Sales control and forecasting
Careers information	Mailing lists	Service records
Catalogues	Maintenance records	Ships information
Civil engineering data	Manufacturing data	Skills database
Classic cars	Map collections	Slides and negatives
Client callouts	Meetings data	Song files
Competitor research	Motorway structures	Sports club player statistics
Computer equipment register	Music	Staff phone directory
Computer maintenance records	Nature conservation information	Statistics
Concert programmes	Newspaper archives	Student registers
Desiderata lists	Object catalogues	Subscription records
Disaster reduction training	Order tracking	Supplier indexes
Drawing records	Passenger lists	Telephone directories
Economic development data	Patent databases	Telephone information for the disabled
Faults reporting	Personnel management	Theses collection
Financial services tracking	Photographs	Trade union membership
Fleet records	Pictures	Train journeys
Glossaries	Planning decisions analysis	Training records
Health and safety data	Plant databases	Translators data
Heirlooms	Population data	Truck specifications
Hire records	Prize winners	Vacancy database
Hotel guest cards	Production analysis records	Vehicle registrations
		Vocabulary database

Exercises and samples

Now that you've seen what Cardbox can do (and perhaps been inspired to use it for more than the original purposes you had in mind), you're practically ready to design databases for yourself.

Designing databases isn't something that most people do very often, and a design, once it's been done, needs to last a long time, so to get you used to this kind of thinking we've created some exercises for you to follow. Each exercise takes a simple and useful database design and takes you through the steps of creating it. We've taken to give you a lot of explanation of exactly why you're doing what you're doing. We hate those so-called manuals that say nothing but "click here, press this button" for page after page without ever telling you what it all means and what it's all for. We don't plan to make the same mistake.

Quite apart from giving you some more expertise, the database designs we've chosen are useful in their own right and you may find that you can build on them to create exactly the design you want.

All these exercises, with their accompanying explanations, are pretty long, so we've put them into Help Points, where you can read them easily or print them out. What we'll do here, on paper, is sell the exercises to you: we'll tell you why each one is useful, what it'll teach you, and what the resulting database will be like.

Help Point 600 tells you how to get the database files for each exercise.

We do recommend that you go through each of these exercises because they give you practical experience of building a new format; but if you really don't have the time, we give you the database files that would result from each exercise, either on the CDROM or as a download.

The instant address book

You can find this exercise at Help Point 610.

At the back of your Filofax (or some other brand of personal organiser) you probably have a large collection of addresses. This is quick and easy to maintain but it's also vulnerable: there are therapists who make a living counselling people who lose their Filofaxes and feel they've lost their lives along with them.

This database is the quickest and simplest address database imaginable. Its sole purpose is to let you look up addresses (and phone numbers, and email addresses) quickly, and to let you print these addresses out onto Filofax-sized paper so you can put them into the back of your personal organiser. The good thing about doing this on a computer is that you can back it up, so that losing your address book or even your whole computer doesn't mean losing your life.

Having the database in electronic form has other advantages, too. You can classify some people as "Reference only", so that you don't waste paper on them but you don't lose touch either. And you can print out selective lists to take with you when you go on holiday.

Here is a sample record in the native format of the database. It has only five fields:

Calahad **Threepwood** Class: **Ref**
 Home: 8997 0000, fax 8997 0228 gally@blandings.co.uk
 Mobile 07866 194461 12 Atherstone Place NW8 9XZ

X. Халлахад К. Халлахад 1533 0067 33 Халлахад Каллахад XXX
 Халлахад Халлахад 0570 387 048 0
 Халлахад Халлахад Халлахад / Халлахад Халлахад 080 8366 8370
 XX ZXX
 Халлахад Халлахад Халлахад Халлахад 0086 3 196 3306 Халлахад
 0068 2767 19314, 336 8008
 Халлахад Халлахад Халлахад ОМ Халлахад 07210 533763 G
 ОХТ XXX
 Халлахад Халлахад Халлахад 0073 8700 00477-74, халлахад 8302
 Халлахад-Халлахад Халлахад Халлахад
 ОХТ - Халлахад Халлахад 0702 461568 5, 02757 3
 or Халлахад 004 TXX
 Халлахад Халлахад Халлахад 2330 4106, халлахад 0540 66713 1
 XXX7 TXX
 Халлахад Халлахад Халлахад 06884 910717
 Халлахад Халлахад Халлахад 0600 652 444 2
 Халлахад К. Халлахад Халлахад (Халлахад Халлахад) Халлахад
 Халлахад Халлахад Халлахад XXX 20 30X
 Халлахад Халлахад 05200 46807 5
 Халлахад Халлахад Халлахад Халлахад Халлахад 0078 760 90788
 Халлахад ("Халлахад Халлахад") 0036 28 68 106 05 Халлахад Халлахад
 Халлахад 07401 26506 0
 Халлахад Халлахад 7213 3700 (78 36 6003, халлахад 0 8000 3
 0600715326 1 88 Халлахад Халлахад Халлахад XX 6XX
 Халлахад Халлахад Халлахад 2678 0100 4 Халлахад Халлахад Халлахад
 Халлахад Халлахад Халлахад Халлахад Халлахад 0 7984 11575
 Халлахад 0743 1 862446 6 Халлахад Халлахад Халлахад XXX 2 703
 Халлахад К. Халлахад Халлахад Халлахад Халлахад 855 1541 76 Халлахад
 Халлахад Халлахад Халлахад Халлахад Халлахад 01102 77300 0, 1260 7060 ;
 Халлахад Халлахад Халлахад Халлахад Халлахад 08526 6 80663 Халлахад 0
 Халлахад 01742 44 5061 Халлахад, Халлахад Халлахад Халлахад
 XXX74 XXX
 ОХТ Халлахад Халлахад 0066 6028 0942, халлахад 1072 07146, халлахад
 005170, халлахад 8024 004220 Халлахад Халлахад Халлахад 08 3 2004
 Халлахад Халлахад Халлахад 4 31 8395 Халлахад 17 4 6000 Халлахад
 Халлахад Халлахад 0120 5210, Халлахад 01262 363213 G

Name – the person’s name, with the surname indexed. This makes it easy to search for people by name and also makes it possible to sort the records quickly into alphabetical order. If you ever need to search for a first name, you can use a Data search to find it.

Phone numbers – one field containing all the person’s phone numbers. There is no need to have different fields for the different numbers because you’ll never want to see them separately.

Email address – this can be cut-and-pasted into an email application.

Address – this is simply written as continuous text, because this database isn’t designed for creating mailing labels or mail-merged letters.

Class – this can be used for classifying addresses to make selective lists easier. For instance, you can use “Ref” to designate addresses that shouldn’t be printed out, so that your printed address list can be concise and your computer address list can be complete: this is perfect for friends you’re not really interested in contacting but don’t want to lose touch with altogether. You can have as many codes in this field as you like, for different kinds of classification.

As well as the native format, there’s an alternative format that you can use to print out pages ready for insertion into your personal organiser: you can see an example on the left. The print doesn’t have to be this small: it’s something you decide when you design the format.

Help Point 610 takes you through every step of designing this database and describes various enhancements: for instance, you can set up the format so that clicking on the email address will open a new email to the person concerned.

The intelligent address book

You can find this exercise at Help Point 620.

This database is a bit more work to set up but it does more for you. It is more work because it has more fields, but the reward of having those extra fields is that it can understand your data a little better. As well as viewing records on the screen, you can make mailing labels from them or create standard letters. You can categorize people not just by their names but by their location. This can be the core of a contacts database for personal or business use, and you can expand it with extra fields, to perform more and more sophisticated selections.

Here is a sample record:

<p>Name: The Hon. Galahad Threepwood Address: 12 Atherstone Place London NW8 8XZ</p>
<p>Tel: 020 8999 0000 Fax: 020 8999 0228 Mobile: 09966 194461 mailto:gally@blandings.co.uk http://</p>

Name – the person’s name, with the surname indexed.

Address – the address. We’ve made this four lines long: if you come across an address that’s longer, type it in anyway, because Cardbox doesn’t limit the length of text that you put into a field, and it’ll all be visible when you print things like mailing labels. If you often have long addresses, just make the Address field longer. We’ve chosen to index just the name of the town, since that’s what likeliest to be used for searching, but you can make your own rules.

Tel, Fax, Mobile – these are all separate fields, so you can decide which of them to include in any particular native format. If you have the Professional Edition and the appropriate software, you can also connect the telephone number to a phone dialler or use the fax number to send automated faxes.

Email – this has the special caption “mailto:”. Cardbox recognises this caption and turns it into a clickable item: when you click on it, your email program will open with a blank email to the person concerned.

Web address – here, the caption is “http://”. When you click on this, your web browser will open the person’s web page (if the person has a web page: Galahad doesn’t).

Once you have the data in your database, you can easily display your records as a summary (above left), or as mailing labels (see left), or indeed in any other format you need.

Name

M.G. **Bodkin**
R.O. **Fish**
Richard **Little**
Aileen **Peavey**
Evangeline **Pembury**
The Hon. Galahad **Threepwood**

Telephone

0043 613 223 1200
03741 880122
01892 110345
001 212 555 1212
03741 883742
020 8999 0000

<p>The Hon. Galahad Threepwood 12 Atherstone Place London NW8 8XZ</p>

Adding extra fields to the address book

This supplementary exercise is at Help Point 621.

You can add fields to this design if you want to do more sophisticated things with your data. This exercise gives you one example: adding a couple of fields to control the sending of Christmas cards. We've chosen Christmas cards as an example because they're a chore that most people can relate to; but of course selective mailings are an important part of almost any commercial activity.

Simple document management

You can find this exercise at Help Point 630.

This database stores all your incoming correspondence so that you don't have to wade through piles of paper when you want to find a letter or document. The key to this exercise is that you scan the letters you receive into your Cardbox database, and you use Cardbox fields to assign categories and keywords so that you can find the documents again. You can read the documents on the screen or you can print them out.

Most of the time you won't need to look at the paper originals ever again, but if you do want to keep some of them (they may be official documents that prove something important), that's easy too. You give each document a number when you put it into Cardbox, and then you can put all the pieces of paper you want to keep into a single binder, in numerical order. When the binder gets full you just start another binder.

You can see a picture of this database on page 221. There are six fields apart from the scanned document:

Date – so you can select correspondence by date or sort it into chronological order.

Number – a reference number. If you have the Professional Edition then Cardbox can assign numbers for you automatically. You use the numbers if you need to look up the paper original of something you've scanned.

To/From – whether it's something you've sent or something you've received.

Name – this can be the name of the person or the name of the organisation. If you want to store both pieces of information, you can create an extra field.

Category – this is a drop-down list of possible classifications. Making it a drop-down list saves you having to type the name and also makes certain that you only ever use one of the pre-defined classifications. If you decide you want an extra one, you can easily edit the native format to add it to the list.

Description – we've made this very brief because its only job is to tell you whether it's worthwhile pressing F12 to look at the document. There is nothing to stop you making the field longer, and even indexing to make it quickly searchable.

If you work from multiple locations then you can take this whole project one step further: put the database on a Cardbox Server and make it accessible across the Internet, and you can read all your papers wherever you happen to be. If you have

a personal assistant, you could even get your PA to do all the scanning for you, so that reading the day's letters simply means starting Cardbox and having a look at what's been added to your database.

Even if you haven't got a scanner it's still worth going through this exercise, because Cardbox is still an excellent way of classifying and finding papers even if you have to open a physical file to read the original documents. In this case you'd probably make the Description field longer, so you can be quite sure that the document is the one you want before you dig it out.

A photograph album

You can find this exercise at Help Point 640.

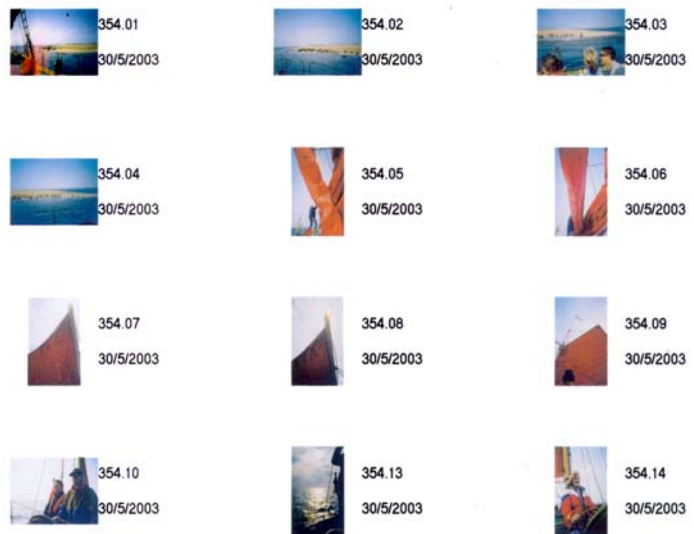


If you have prints, you can use a scanner to scan them in to Cardbox: in that case the image in Cardbox is only a scan of the original print, and you should keep the originals filed away because they will be of better quality. If your photographs are from a digital camera, PDA or mobile phone, you'll be able to import them directly into Cardbox, probably without loss of quality if they are in JPEG format.

You can index your photographs, number the frames, and add keywords and dates.

You can search for and select photographs. You can print individual ones at full size or you can tag the ones you are interested in and print them out as a contact sheet. If you want to have reprints made for your friends, you can administer this easily by having an extra field to hold the friends' initials.

Other visual things can be handled in the same way. You could take photographs of your most treasured possessions so as to be able to give them to the police or your insurers if anything happens.



Bibliographies

You can find this exercise at Help Point 650.

This exercise takes you through the process of creating a simple bibliographical database that can handle both books and articles from journals. You can use this to print search lists that you can take to the library with you; you can add your own comments to each reference; and you can print out bibliographies in the right format for inclusion in a paper or a thesis.

Title: Sir Garnet Wolseley		
Author: H.M. Kochanski		
Publisher: Hambledon Press	Where: London	When: 1999
Journal: Details of article:		
Library: London Library	Shelf mark: H Army, English	
Keywords: Military history; army reform; biography	<input checked="" type="radio"/> Book <input type="radio"/> Article <input type="radio"/> Other	<input type="radio"/> Primary <input checked="" type="radio"/> Secondary

Here is what the various fields are and what they mean:

Title, Author – the title and author of the work.

Publisher, Where, When – the publisher and the place and date of publication.

These fields only apply to books, so we've given them a different background colour to distinguish them from the others. Cardbox lets you give any element in a format a different appearance from the others, and this can be useful to help you navigate through filling in a big form.

Journal, Details – the name of the journal and the exact volume, date and pages involved. These fields don't apply to books, so again we've given them a different colour.

Library, Shelfmark – finding the things you want to read is a time-consuming part of academic research, and these fields help to organise it and make sure that you don't waste time by losing references.

Keywords – how thorough you want to be about developing a set of keywords and applying them consistently depends on the kind of project you are doing and how you are approaching it. We've given you one smallish Keywords field, but of course the size of the field is up to you, and you can add other fields if you like. The keywords don't need to appear on any printed bibliography: they are for your use only.

Book/Article/Other – note that this is just a single Cardbox field, displayed as a set of radio buttons to make it clear what the options are and to make sure you only choose one of them. This field is searchable, so you can search or print out just one kind of material if you choose.

Primary/Secondary – serious research often requires you to distinguish between primary and secondary sources. If you don't need this field then you can leave it out of the design.

Extra text – although we haven't printed it here, this is a good place to use the Extra Text field. You can use it to contain your comments on the contents or even the usefulness of the book or article, and you can view each record on its own or together with its Extra Text.

Alternative formats

Alternative formats come into their own in this database. You have alternative formats for printing out bibliographies of books and of articles; a summary format to take to a library; and a one-line format that is useful when you want to view a lot of records at once while searching. Help Point 650 describes how to create all these and how to use them.