Getting started with Cardbox.

Getting Started

Cardbox is a flat-file database program. It lets you design your own databases, so you can make them hold anything – people's contact details, books, abstracts, photographs, biographies, CVs of job applicants, personal records, lists of stolen antiques, museum catalogues, contracts and official documentation, confidential accident reports, poisoning incidents. Whatever it is, if you can make a list of it, you can organise it with Cardbox.

"Getting Started" will help you learn your way around Cardbox:

- If you have to find information in a Cardbox database.
- If you're thinking of buying Cardbox.
- If you've bought Cardbox but don't want to open the book just yet.

We have divided "Getting Started" into four parts:

1. Viewing, browsing, searching, printing, etc.

2. Images, photographs, and documents.

3. Adding and editing records (including automated batch-editing).

4. Designing your own formats and databases.

What you need

You need Cardbox. For the first two parts of "Getting Started" any old version of Cardbox will do, even the freely downloadable Client Edition. When you get on to adding and editing records and designing your own formats, you'll need a licence of some kind – either a full licence or a time-limited evaluation licence.

You need the sample databases. "Getting Started" talks you through Cardbox by using these databases. You can download them or you can access them across the Internet, directly on our Cardbox Server.

If you've installed Cardbox from the CDROM then you should already have everything you need. If you're downloading Cardbox to try it out, see the Cardbox web site for what to download and how to arrange a trial licence.

www.cardbox.com

Getting more information

At every stage of your guided tour through Cardbox you can take side trips of your own. Explore the menus, look at the commands and try them out. One of the best tools to help you do this is the Cardbox help system.

F1 = Help

Wherever you are in Cardbox, you can press the F1 key. The help file will open and show you a page relevant to where you currently are. If you're in the middle of a command, it will give you help on that command; if you are editing a format, it will tell you all about editing formats.

Getting help on menu commands

If a menu command is disabled, move the mouse onto it and wait a moment. Cardbox will explain why the command isn't available.

When you open a menu and move your mouse over the various commands, watch what happens to the status bar at the bottom of the Cardbox window. As you move over a command, the status bar will show a brief explanation of what the command does. If you want more information, press F1 while you still have the mouse over the command.

Help Points

References to Help Points usually appear in the margin.

As you read through this book, you'll see references to "Help Point" and a number. Help Points are help file articles that give you more details on something the book is talking about: in many cases they also have links to other parts of the help file. To view a help point, use the command Help > Help Points and then type in the number of the help point.

Starting Cardbox

You can start Cardbox by opening a Cardbox icon from the Start menu or the Windows desktop. You can also start it automatically by double-clicking on a database file.

Opening a database

How you open a database depends on where it is. In "Getting Started", we'll be dealing with sample databases that have been downloaded to your Sample folder, or sample databases on our Cardbox Server.

Databases in your Samples folder

File > Open
Ctrl + O

Use File > Open and then go to the "Samples" tab. If you downloaded the sample files somewhere other than Cardbox's Samples folder then you won't see a Samples tab: use the "My Computer" tab instead.

Databases on our Cardbox Server

Use File > Open and then go to the "Servers" tab. If `database.cardbox.net` isn't already highlighted then double-click on it and you'll see a list of available databases.
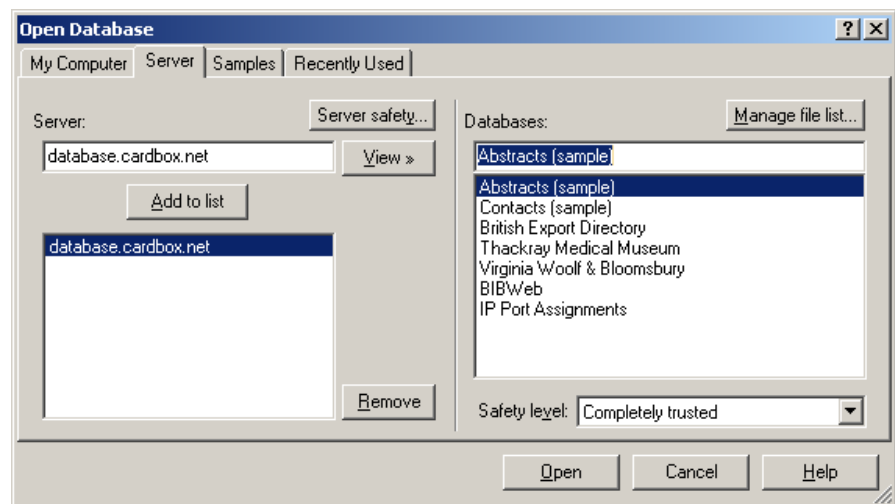
Opening several databases at once

Keyboard shortcut:
Ctrl + F6 takes you from
one database window to
the next.

There is nothing to stop you having more than one database open at the same time, and it's often a very useful thing to do. Each database gets opened in its own window within the main Cardbox window. The Window menu lets you control these windows and switch between them. It also lets you decide if all the database windows should be visible together within the Cardbox window or whether you just want to see one database window at a time.

Advanced feature: workspaces

When you close Cardbox and re-open it again, it will re-open all the databases that were open before you closed Cardbox, so you can carry on exactly where you left off.

More information: do
File > Workspace and
then press F1.

This collection of open windows and files is called a "workspace" and if you are using Cardbox for several different projects then you can create a separate workspace for each project, open selected workspaces, and switch between them.

The Contacts database

We're going to start by opening the sample Contacts database. Here it is:

Name: Anthony **Alcott**	Date:**1/7/2004** By:**ALC** Ref: **1**
Position:	
Org'sation: **Alcott Associates**	Last contact:**22/7/2003** Next contact: **6/9/2006**
Address: 8 Gresham Road	Sales Rep.: Katy **Matthews**
Bexhill-on-Sea	Products of interest:
	☒ ANACC ☐ CATALOG ☐ DATABASE ☒ DATENC
	☐ JOBCONT ☐ PICBASE ☐ TRANSURE
County: **East Sussex**	How heard of products:
Postcode **TN39 6DT**	○ Advertisement ○ Dealer ○ Mailshot ● User
Country:	○ Word of mouth
Tel: 01424 847301 Fax: 01424 847303	Business:**Financial Consultant**
Mailto:**a.alcott@alcottassociates.co.uk**	Dear: Mr Alcott
Contacts history: see text	

We have designed this database as an example of how you might use Cardbox for contact management. Even if you have some completely different purpose in mind for Cardbox, the basic principles of operation are always the same and you'll learn a lot about Cardbox just by following our tour through the Contacts database.

Nothing about this database is compulsory. This is simply a database that we have designed as an example, to illustrate Cardbox's features and give us something to build a "Cardbox tour" round. Everything about it is our own choice, from the colour scheme to the number of fields and their size and shape.

Your choices may be different. When you come to design your own databases you are completely free: you can design a database for any purpose, not just contact management. You can copy any ideas that you like and ignore the others.

Indexed text

On the screen, these bold words are displayed in red.

You'll see that some words are displayed in **bold** text. This means that they have been marked for indexing. Cardbox's indexing is what makes it so fast: when you search for a word, Cardbox looks it up in its index rather than having to scan through every record in turn. We've chosen to have indexed terms displayed differently from unindexed ones because we find the database easier to use that way; if you don't agree with us, you can choose to have unindexed and indexed text looking identical in your own designs.

You decide the indexing policies for each field when you design your database.

An important feature of Cardbox is that you can have several terms indexed in each field. This sets it apart from most other mainstream database programs. You can have every word indexed in a field, or you can put indexing under manual control so that some terms in a field are indexed and others aren't: this is what lets you say "Anthony Alcott" where other programs would insist on "Alcott, Anthony" or on splitting the name into two or three separate fields.

Finally, note that when we say "words" we really mean "words, numbers and dates". Cardbox recognises numbers and dates by looking at them, and indexes them appropriately.

Check boxes and radio buttons

You'll see that the "Products of interest" field has a set of check boxes rather than just a space for typing text. This is a powerful feature of Cardbox that you can apply to any field: it ensures that only specific codes are entered into the field, and it lets you enter them with just a mouse click. You decide what fields should have check boxes, and what

the codes should be, when you design the database. You can always change your mind later and add new codes if you need them.

Radio buttons work much like check boxes except that they only allow a single option to be chosen. In addition to check boxes and radio buttons, Cardbox also lets you display a field as a drop-down list, from which you can select a single item when you are entering data into the record.

Extra Text

At the bottom of the Contacts screen display you'll see a horizontal line with some text below it. This is the Extra Text field.

Some other database programs have a "Memo field" that works much like Extra Text.

The Extra Text field is optional. If you decide to have one, it behaves like a sheet of paper pasted to the back of an index card: it can contain as much text as you like and it can be viewed and printed together with the main record or separately. Extra Text can't be indexed but it can be searched using Cardbox's Search > Data menu.

We won't talk about Extra Text again in this "Getting Started" – the Cardbox books give more information, and so does the on-line Help. If you can't think of a use for Extra Text, just forget about it: after all, Cardbox's normal fields can be huge and can store a large amount of text in any case.
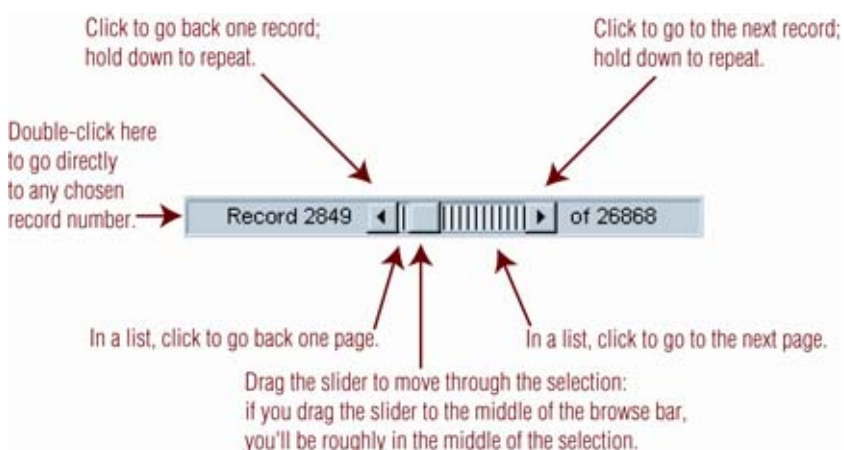
Browsing through records

At the bottom of the Cardbox screen you'll see a display in the status bar telling you you're on the first record. Press the right-arrow key and you'll move to the second record; press it again and you'll move to the third.

We call this simple stepping through records "browsing". It's something that you will do time and time again – usually after making a selection of records, but you can do it at any time that Cardbox is showing you records on the screen, even before you have entered any selection commands.

Browsing with the browse bar

If you look at the bottom of the Cardbox window you'll see what looks like a scroll bar with corrugations. This is called the browse bar. It tells you which record you're looking at and how many records there are in the current selection.

If your records are small enough for Cardbox to display them as a list, you'll get an additional browse bar, placed vertically next to the list.

Browsing with the keyboard

Right arrow Down arrow	Next record.
Left arrow Up arrow	Previous record.
Ctrl + Home	First record.
Ctrl + End	Last record.
Ctrl + G	A specified record number. Cardbox will ask you which record number you want.
Ctrl + Z	The record you were on just before the last big jump (Ctrl + Home or Ctrl + End) or the last search command.

Page Down	Go forward one page in the list.
Page Up	Go back one page in the list.
Home	The top record on this page.
End	The bottom record on this page.

The current record

Whenever you look at a Cardbox database, one record is the **current record**: if you tell Cardbox to edit, this is the record that will get edited; if you tell Cardbox to delete a record, this is the record that will get deleted. If the screen is only displaying one record, that's the current one; if the screen is displaying a list of records, Cardbox draws a thin black frame round the current record so you can see which one it is.

Formats and appearance

A format is what gives shape to your data. It is everything you see on the screen when you look at a record, except for the actual data. It covers the way your fields are laid out (and which ones appear at all), plus any captions, lines, boxes, and so on. A Cardbox database can have as many formats as you like. Some databases have one, others may have dozens.

The native format – You've already seen the main format of Contacts: this was the first format we created and it's the basis of all the others. Cardbox calls this first format the "native format".

Many database programs call this sort of format a "list view".

One-line Summary – We've put this format in so that you get a simple summary of the currently selected records. We'll use it a lot when taking you the searching facilities of Cardbox: because it's only one line long, Cardbox can display many records on the screen at once and help you see where you are.

Katherine **Wingett**	Hill End 14 Hawthorn Street **Bootle**	**Cumbria**	**Manufacturing**: Batteries
Joe **Bishop**	26 Lucastres Street **Caernarfon**	**Gwynedd**	**Surveyor**
George **Raft**	70 Chesterton Road **Caerphilly**	**Mid Glamorgan**	**Dentist**
Richard **Holian**	10 Kedale Road **Campbeltown**	**Strathclyde**	**Retail**: clothes
Jane **Lowe**	37 Finstock Road **Cannock**	**Staffordshire**	**Estate Agents**
Tom **Robinson**	20-26 Portland Road **Carlisle**	**Cumbria**	**Manufacturing**: Rope
Jeremy **Austin**	42 Park View Street **Cartmel**	**Cumbria**	**Photo Agency**
Lucinda **Duckett**	The Grey House 2 King Charles Street **Nairn**	**Highland**	**Electrical Engineer**
Michelle **Herbert**	105 Balvernie Street **Chepstow**	**Gwent**	**Structural Engineer**

Leads Summary – We've designed this format to show the fields that are most appropriate for analysing sales leads.

Name	Organisation	Contact date	How heard	Product of interest	Ref.
Anthony **Alcott**	**Alcott Associates**	**1/7/2004**	**User**	**ANACC DATENC**	**1**
Andrea A. **Atkinson**	**AAA Publicity** Ltd	**1/7/2004**	**Advertisement**	**PICBASE**	**2**
Mary **Nesbitt**	**Nesbitt & Werman**	**1/7/2004**	**Advertisement**	**DATENC**	**3**
Marcus **Young**	**Alco Designs** Ltd	**1/7/2004**	**Mailshot**	**JOBCONT**	**4**

Reps Summary – This format shows fields relevant to managing sales representatives.

P-M. Scheuer	International Credit Rating Ag	Pauli Goring	1/11/2005
F. Burgat	Draesner & Partners	Pauli Goring	11/10/2005
H. Fischer	Weintraub & Meikle	Pauli Goring	31/1/2006
Ms V. Monchi	R.L.P. International	Pauli Goring	20/12/2005
Joren Madsen	Stein Richter	Pauli Goring	17/1/2006
H. Haddock	Haddock & Co	Margaret Grimaldi	1/11/2005
Ms S. Whitlock	Grieves Rickards Hanson	Margaret Grimaldi	17/1/2006

Label – The name and address of the contact, mail-merged into a suitable format for a mailing label. When you are setting up the printing, you can tell Cardbox what size the labels are and how they are laid out on the page.

Miriam Fazal
Wilson Carrington
1155 Wilson Boulevard
Los Angeles
CA 90807
California
USA

Demonstration letter - a mail-merged letter that pulls in fields from a record. You can use this kind of format for personalised letters, individually or in bulk; for filling in the blanks in standard forms or contracts; or for emails or faxes. Your Cardbox database can have as many different letter formats as you like.

Ms Mary Padfield
Derry & Mann Ltd
121 Bolt Road
Southampton
Hampshire SO3 8DA

We have made the fields blue so you can see where the data come from. A real letter would all be in one colour.

Dear Ms Padfield

Here are the product details you requested.

Following our recent conversation, I enclose details of the products you are interested in.

I will contact you next week in order to arrange an appointment, but if you would like to discuss anything beforehand, please call us on 06881 289000 and quote reference PICBASE.

Yours sincerely

Damian Taylor

Exploring formats

**View > Change Format
Ctrl + F**

View > Change Format lets you switch to a different format. It will show you a list of formats and you can do any of the following:

• Type the name of the format and press OK.
• Or select the format in the list. You'll see a description of the format at the bottom of the window (assuming that whoever designed the format gave it a description). To use this format, press OK.
• Or double-click on the name of the format in the list.

When you first open a database, you will be viewing the data using the "native format". The native format is the first format that you create for a database. It doesn't have a name. Try using View > Change Format to explore what formats are available in the sample database you have opened.

Changing the appearance

**View > Appearance
Ctrl + A**

You can change the fonts, sizes, colours, backgrounds and line thicknesses that are used to display or print your data. You can do this while you are designing a format, but you can also override the appearance at any time by using the command View > Appearance.
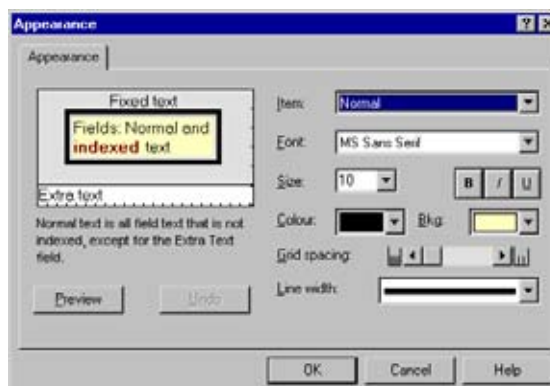
Indexing

To make searching faster, Cardbox creates an index of your database. That way, instead of having to look through every single record to find the ones you're looking for, Cardbox can look at the index and find what you want in a fraction of the time. The bigger the database, the bigger the benefit.

Indexing is something that all databases do to some extent, but here's how Cardbox is different:

- It can index every word, number, or date in a field.
- Within a single field, it can let you choose which words (or numbers, or dates) to index.

Unlike with many other databases, you don't have to twist names round to fit the way the computer wants them – "Public, John Q." – or even "John | Q | Public" in three separate fields. You don't have to have artificial fields (KEYWORD 1, KEYWORD 2, KEYWORD 3) or use sophisticated programming. You just mark the words you want to be indexed, and Cardbox indexes them.

For each field, you decide the indexing strategy at the time you design the field; although you can go back and change your mind afterwards. The simplest indexing modes are All, which indexes everything in a field, and None, which indexes nothing. More interesting is Manual, which lets you mark individual words for indexing as you type them in (or you can go back and mark or unmark them later). There is also Auto, which is rather like Manual backwards: everything's indexed unless you tell Cardbox not to index it.

You can tell Cardbox to display indexed words differently from unindexed ones. In our sample databases we usually do this, to make it clearer what is going on; but it's not compulsory and for some purposes, such as printing, you'll want to make indexed and unindexed words look the same.

You can also set up "validators" which index selected words automatically without you having to mark them. Validators are part of the Professional Edition of Cardbox.

Date formats and Cardbox

There are many different ways of writing dates. Even the sequence of the components varies: 'day, month, year', 'month, day, year' and 'year, month, day' are all used in different parts of the world. Because Cardbox databases can be international, Cardbox cannot deduce the date sequence from the location where you're using it. Instead, it looks at the way you typed the date: specifically, at the character that you used to separate the different parts of the date. Here is the 19th of April 1962:

Separator	Format	Example
/ (slash)	day/month/year	`19/4/1962`
– (hyphen)	month-day-year	`4-19-1962`
. (decimal point)	year.month.day	`1962.4.19`

- The day and the month can be one or two digits long: 04 is the same as 4.
- Cardbox identifies the date format by looking at the separator, so you cannot enter something like 4/19/1962 and expect Cardbox to handle it properly.

When Cardbox indexes a date, it reshuffles it into a number, in a standard format. All the date formats shown in the example above will be indexed as the same number, 1962.0419. This has the advantage that when records are sorted into numerical order, this will yield exactly the right date sequence as well.

As a result of the way that Cardbox indexes dates, when you are previewing an indexed search, the preview listing will show all your dates as numbers.

Simple search commands

To keep this description simple we'll assume that you're using our Contacts database; but if you are using another database then you can explore it in much the same way.

Use View > Format to switch to the One-Line Summary format.

Searches behave the same way whatever format you are using, but this summary format will make it easier to see what records you've selected.

The Select command

Right-click anywhere in the Address column. A search window will pop up. Type the word London in the "Search for" box and hit Enter (or click on OK).

Cardbox will search for records that have "London" indexed in the Address field. It will show you all the records it has found, and you can use the keyboard and browse bar to browse among them.

This is one of several ways of starting a search. You can also use a menu command or a toolbar button to do the same thing.

Search > Select

Before you start a simple search, always make sure that the status bar says "Level 0", which means that Cardbox is showing you every record in the database. If you don't do this, your search commands will go towards refining or revising the last search that you did.

To get to Level 0, do Search > Clear All Selections, or hold down the Ctrl key and press the Undo button on the toolbar:

The Exclude command

Go back to level 0, and do almost the same thing again. But this time, instead of right-clicking in the Address column, depress the right mouse button and hold it down for a second or two. A menu will pop up with a list of commands: choose "Exclude" from the list. A search window will pop up. Type the word London in the "Search for" box and hit Enter or click on OK.

Search > Exclude

As before, Cardbox will search for records that have "London" indexed in the Address field, but this time it will discard those records from the current selection and show you the records that **do not** have "London" indexed in the Address field.

Things you can search for

So far you have searched your database for a single indexed word, but there are many other kinds of index searches.

Wildcards

When you type a word into "Search For", there are two special characters you can use as wildcards:

> ? matches exactly one character.

> * matches any number of characters (including zero characters).

If you're not sure what words your wildcard will match, press the Preview button and Cardbox will show you a list.

This can be useful if you want to capture a number of different spellings, or if you aren't sure if a term was being used in the singular or the plural (HOUSE versus HOUSES) or if you're in a hurry and don't want to type the whole of a long and complicated word.

Ranges of words

You can put two words separated by a colon into the "Search For" box:

Unlike numeric and date ranges, word ranges are a specialised feature and few people use them.

E:K   finds all indexed words beginning with a letter from "E" to "K" inclusive.

:COB   finds all words from the beginning of the index to the last word that starts with "COB".

XE: finds all words from the first indexed word that starts with "XE" to the last word in the index.

Single numbers and dates

To search for a single number or date, type it into the "Search For" box and press OK. For details of the date formats that Cardbox understands, see "Date formats and Cardbox", above.

Ranges of numbers and dates

You can put two numbers (or dates) separated by a colon into the "Search For" box:

`17:32`	finds any indexed number between 17 and 32, inclusive.
`14.6:`	finds any indexed number greater than or equal to 14.6.
`:30000`	finds any indexed number less than or equal to 30000.
`:`	finds all indexed numbers.

Phrases

If you put a series of terms (words, numbers, or dates) in quotation marks, Cardbox will search for records that contain those terms adjacent to each other and in exactly that order. It will only look at things that are indexed: unindexed text will be ignored.

`"RED DOG"` will match BIG RED DOG but not RED BIG DOG.

You can also search for words that are in a particular order but may have other words separating them, by using special search words.

`...` (three dots)	will match any number of words. So "RED ... DOG" will match RED DOG, RED BIG DOG and RED BIG FIERCE DOG.
`*` (asterisk)	will match exactly one word. So "RED * DOG" will match RED BIG DOG and RED LITTLE DOG but not RED DOG or RED BIG FIERCE DOG.

There are more sophisticated options as well: for instance, you can search for two words that are not more than a certain distance apart.

Lists

You can type several terms (words, numbers, or dates) into the "Search For" box, separated by spaces. What happens depends on the setting of the "Match All" option.

With "Match All" turned off, Cardbox will find records that contain any of the terms you have typed: in Boolean terms, this means OR.

With "Match All" turned on, Cardbox will find only those records that contain all the terms you have typed: in Boolean terms, this means AND.

Some more examples:

This is what we do when someone comes back from paying in cheques at the bank. We open our Sales Ledger database, right-click on the Invoice Number field, and type a command like this one to find all the invoices whose cheques have just been paid in. You can see that the "Search For" box accepts ranges as well as single values.

This is something we use when we need to find a user's record but have nothing more than an abbreviated company name to go on. It'll find any record where the field contains a word beginning with S, a word beginning with V, and a word beginning with R, not necessarily in that order.

Boolean combinations (advanced searching)

You can have more elaborate combinations of search terms than just "any" (OR) or "all" (AND), by using a few extra symbols:

A plus sign + in front of a term means that that term must occur in any record that Cardbox finds: a Boolean AND.

A minus sign – in front of a term means that that term must not occur in any record that Cardbox finds: a Boolean AND NOT. [If you put this in front of a number, leave a space between the minus sign and the number, or Cardbox will think that you're simply talking about a negative number].

Parentheses ( ) round a group of terms means that at least one of those terms must occur in any record that Cardbox finds: a Boolean OR.

You can combine these symbols in more or less any way you like. For example, `(HISTORY HISTORI*) +(INSTITUTE SOCIETY)` would find records that had INSTITUTE or SOCIETY in them as long as they also had HISTORY, HISTORIAN, HISTORICAL, etc.
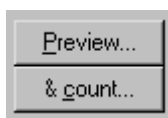
If a search gets this complex then you may find it easier and clearer to build it up step by step, combining separate Select and Exclude commands instead of using a massive Boolean combination. The next section will tell you how to do this.

Preview lists

On the right-hand side of the Search command windows you'll find two buttons, Preview and Preview-and-Count. They almost do a search, but not quite. Instead of finding records that match your command, the Preview buttons look through the index and find the index terms that match, and they present you with a list of them. Here are some possible uses:

- If you've put a wildcard into the "Search For" box, you can use Preview to work out if it'll find what you want it to find.

- If you're not very familiar with the database you're using, and you aren't sure what values a field can contain, you can leave "Search For" blank, press Preview, and get a list of the indexed terms in that field. Remember to set "Which Index" to "Words" or "Numbers/Dates" first, because Cardbox can't guess which index to search if you haven't typed anything into "Search For" that would give it a clue!

- If you want to search for only some of the terms in the list, use Preview to bring up a list of index terms and then click or Ctrl + click on the ones you want to use in your search, to highlight them.

- When you've highlighted all the terms you want, press OK and Cardbox will find the matching records. This is especially useful if you are looking for misspelt or inappropriate index terms.

ALBANIA	CHANNEL ISLANDS	FRA
ANTILLES	CHILE	GER
ARGENTINA	CHINA	GHA
ARUBA	COLOMBIA	GIBF
AUSTRALIA	CROATIA	GRE
AUSTRIA	CYPRUS	HAI1
BAKU	CZECH REPUBLIC	HON
BARBADOS	DENMARK	HUN
BELARUS	ECUADOR	INDI
BELGIUM	EGYPT	INDC
BENIN	EL SALVADOR	IREL

AUSTRALIA,18	MALTA,1
BELGIUM,46	MEXICO,1
CANADA,10	NEPAL,1
CHANNEL ISLANDS,8	NETHERLANDS,2C
CHILE,2	NORWAY,19
CHINA,1	PERU,1
DENMARK,3	PHILIPPINES,1
FALKLAND ISLANDS,2	PORTUGAL,2
FRANCE,5	SAUDI ARABIA,1
GERMANY,3	SOUTH AFRICA,1
GIBRALTAR,3	SPAIN,1

Preview and Preview-and-Count are very similar. Preview lists all matching index terms; Preview-and-Count counts how many records in the current selection match each term and if no records match, it doesn't list the term

Fuzzy matching

Sometimes you're not sure of the spelling of a word that you're looking for: this is especially true of names. One option is to use wildcards, but they aren't always the best idea because they're often too powerful. `COLO*R` will find COLOR and COLOUR but it will also find COLONISER. And is it STREATFIELD or STREATFEILD? Finding a wildcard that matches both of them is a tedious effort. In cases like this, fuzzy matching is the solution.

In fuzzy matching, Cardbox finds index terms that **almost** match what you put in the "Search For" box. What you put into the "Fuzziness" box dictate what Cardbox means by "almost matching" – anything from a one-letter difference upwards.

Building up complex searches

Go back to your original search for "London" in the Address field (remembering to start at Level 0, with 1000 records) and do it again. You'll end up with 202 records and a status bar that says "Level 1".

Now, starting from Level 1, right-click on the Business column and type the word Accountant.

If you are used to Boolean logic, Select is AND, and Exclude is AND NOT.

You'll end up with 11 records, representing the accountants in London. Cardbox has looked at the current selection (Level 1), picked out the records that match your new Select command, and created a new selection out of them. In other words these two Select commands have combined, and the records you're left with (at Level 2) are just those that match **both** the Select commands.

This is a simple example but you can use the same principle to combine selections in any way you like, building up even the most complex searches in simple straightforward steps.

History of Selections

When you're doing an elaborate search, it is useful to see exactly how far you've got and what commands you've used so far. The command for this is Search > History: try it now.

Search > History
Ctrl + H

You will see a list of the search commands you've used to get you to the current selection. Keep the History display around when you're learning your way round Cardbox, because it will help you see where you've got to when you're building up a really complex search.

Highlight Matches

Another useful command when you're exploring is View > Highlight Matches. When you turn the "Highlight Matches" mode on and then enter a search command that looks for a word, Cardbox will highlight the word wherever it sees it in your record display. This can be helpful if you've got a field with a lot of text in it and you want to see the word in its proper context.

Commands that expand the current selection

Include

Include starts with the current selection.

It creates a new selection from it, by adding to it **every record in the database** that matches the Include command.

Select Also

In terms of Boolean logic, Include and Select Also both function as OR.

Select Also starts with the current selection.

It creates a new selection from it, by adding to it **every record from the previous selection** that matches the Select Also command. This sounds rather technical but it is often very useful: the Cardbox books and the help file give a detailed explanation.

Undoing search commands

Undo One Level

Undo goes back one level of selection: from Level 3 to Level 2, or from Level 1 to Level 0. For basic search commands, this is similar to undoing the last command.

Clear All Selections

Clear undoes all selections at once and gets you back to Level 0, where all the records in your database are visible and ready to be searched. You can also use the toolbar to do this, by holding down the Ctrl key as you click on the Undo button.

Other kinds of search

Cardbox can do a lot more than just search on indexed words, numbers and dates.

Data searches

Normal Cardbox searches look at indexed words. You can also make Cardbox search all text (indexed and unindexed), although it's a bit slower. To explore this option, look at the Search > Data menu. Choose one of the search commands and then press F1 to see the on-line help.

Relational linking

This is a feature of the Professional Edition only. For full details, see Help Point 500.

In a relational link, you set up a search in one window, but instead of typing the text to be searched for yourself, you tell Cardbox to look in another window to find the search text. The result is a "live" link, because Cardbox repeats the search every time that the search text changes (for instance, because you move from one records to the next).

Kept selections

You can save any selection of records and give it a name, and you can later combine named selections together. Kept selections can be temporary (lasting until you close the database) or permanent. This feature has all sorts of uses: for more information, look at the Search > Keep menu and press F1 to see the on-line help.

## Combining selections from different windows

Cardbox lets you open the same database in several windows. Some people take advantage of this feature and use it to do separate searches in both windows. If you do this, and then you want to combine the selections from both windows into one, do Window > Merge. This will bring up a menu that lists the windows that are available: choose the window you want. Window > Merge takes the current selection in the current window and creates a new selection consisting of all the records in that selection plus all the records that are in the current selection in the window you picked from the menu.

Tags and tagged searches

Tags and tagged searches are unique to Cardbox. They're so useful that we find it hard to understand why every database program doesn't have them; but so far Cardbox is the only one. If you do any database searching at all, tags will make a difference. Read about them and try playing with them: they can't do any harm and they may make your life a lot easier!

Let's start with a definition:

> A tag is a temporary mark that you can make on the record you're looking at. Tags don't alter the content of a record, they don't change how the record looks when it's printed, and if you're on a network, other users of the database won't be able to see your tags.
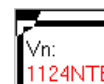
**Tag > Tag Record
TAB**

Tagging is easy. To tag or untag a record, move onto it and press the Tab key; or just hold down the Ctrl key and click on the record.

So what are tags for?

> **Just as you can search on indexed words, so you can search on tags.**

And that's it. The point of tags is that they form a quick and informal way of fine-tuning your searches or of putting complex searches together. Here are a few examples.

Fine-tuning a search

Look through your selected records of accountants in London. As you glance through them, you may see that only some of them are really records that you want. Rather than invent a complex search that will exclude the unwanted records and leave you with the wanted ones, just do this:

1. Tag the records you want.

2. Use Search > Tag > Select to select them.

Excluding specific records

Tags have many other uses. Suppose that you're preparing a big mailing and you've selected the records of the people you want to write to. But you've talked to one or two of them recently, and you don't want to send the usual standard letter to them because you want to write to them personally.

1. If you want mailing labels as well as standard letters, print out the mailing labels.

2. Tag the records of the people who should have personal letters.

3. Use Search > Tag > Exclude to exclude them from the selection.

4. Print out standard letters for everyone in the new selection.

5. Use your favourite word processor to write those personal letters.

(Without tags, you'd have had to design an extra field in your database saying "needs a personal letter" or "has been talked to recently", which means more complication and more bureaucracy).

The Tag menu

To find out all about tags, open the Tag menu and press the F1 key for help.

Search > Tag opens the Tag menu. This contains commands to tag and untagged records and to do various searches based on taggedness.

If you use the Tag menu a lot then you can promote it so that it becomes part of the menu bar at the top of Cardbox and you don't need to open the Search menu every time you want to use it.

Sorting

Records in a Cardbox database naturally come in the order in which they were added, so that the first record that was put into the database comes first and the one that was added most recently comes last; but you can sort the records into any sequence you like, view them in their sorted sequence, print them, or write them to a file.

Simple sorting

Simple sorting is easy to specify and it is quite fast. It is restricted to just one field, and Cardbox only looks at the first indexed term of that field. This means that if you have a field that contains several indexed words, and you do a simple sort on that field, the records will be in alphabetical order as far as the first word is concerned, but the second and later words will be ignored.

Select...
Exclude...
Step Browse...
Data ►
Sequence

To do simple sorting using the mouse, move the mouse onto a field, press the right-hand mouse button, but don't release it for a few moments. A menu will pop up. Choose the Sequence command, and Cardbox will do a simple sort on your chosen field, in ascending order.

Try it now: sort your selected records on the Name field. To turn off the sorting, use the Sequence command again,

The Sequence command

View > Sequence
Ctrl + U

View > Sequence is another way of sorting records. As well as doing a simple sort, it also lets you sort records into sequence on the basis of more than one field. For instance, if you had a database of addresses, you could sort your records according to the country, and then, within each country, on the town, and then, within each country and the town, on the name of the person or organisation. You can specify ascending or descending order separately for each field in your list.

To find out more, do View > Sequence and then press F1 for on-line help.

When you have selected your records

When you have selected your records, and sorted them into order, what do you do next?

In many cases, of course, looking at the records on the screen – and perhaps editing them there – is all you need. Think, for example, of giving technical support by telephone: you take the call, look up the records, and write up the call afterwards.

But there is a lot else you can do:

Printing

You can print one record or a whole selection of records.

You can choose any format for printing, any sorted sequence, and any appearance.

You can use File > Print Preview to preview your printed output before you actually send it to the printer.

You can print on paper or on a sheet of mailing labels.

To find out more about all this, do File > Print and then press F1 for on-line help.

Data export

Instead of printing your selected records you can export them to a file for another program to read. You have a wide variety of available output formats (including comma-separated and XML) and you can also design specialised Cardbox formats for particular requirements. To find out more, do File > Export and then press F1 for on-line help.

Fax

You can send records by fax by printing them to a fax device; the Cardbox help file also gives some sample macros that you could use (with suitable fax software) to send customised bulk faxes (macros are part of the Professional Edition of Cardbox).

Email

Cardbox can create customised mail-merged emails and send them to multiple recipients using Tools > Bulk Email. Press F1 to find out more about this command.

These commands are part of the Professional Edition.

Alternatively, Cardbox can take your entire selection of records and send it, as a single email, to a recipient you designate. The command for this is File > Send as Email. Again, F1 will give you all the necessary information.

If you don't have direct access to Internet email then the Cardbox help file has sample macros for sending emails via Eudora and Microsoft Outlook.

Finally, you can turn an email address into a clickable "hotlink", anywhere in a record, by preceding it with the characters "mailto:". This is why we have used "mailto:" as the caption for the Contacts database's email field.

Images: documents and photographs

Cardbox is not just about text. Apart from its text facilities, Cardbox has an image field that you can use to store anything visual – a photograph, drawing, scanned document, or fax.

An image field can store multiple images. For example, if you wanted to store a 57-page document in a Cardbox record, each page would count as a separate image, and so the image field for that record would contain 57 images.

The Property database

The Property database is a sample database that has been used to store documents relating to the purchase and maintenance of a house. The purpose of the database is:

- To have a record of all legal documents involved in the purchase of the house.
- To have copies of all documents that might be needed when the house is sold.
- To build an archive of all work that has been done on the house: specifications, guarantees, etc.
- And, generally, to avoid getting buried under a flood of paper.

Because you're going to be downloading it, we've kept the sample database very small: 4.5MB, holding 86 A4 pages. This makes an average of about 53KB per page. Typed pages usually take less than this; pages full of photographs usually take more.

Opening the Property database

There is no need to close Contacts before opening Property: Cardbox can happily have many databases open at the same time.

If you have downloaded the Property database into Cardbox's Samples folder, use File > Open and then the Samples tab.

If you haven't, use File > Open and then the Server tab to open the database directly on the Cardbox Server. Because images can be large and Internet connections can be slow, you may occasionally see clocks instead of the image you're expecting to see. Don't worry: wait a moment and the clocks will disappear as the image arrives.

What the Property database contains

Mostly, this database looks like any other Cardbox database; but on the right-hand side of each record you'll see a tiny representation of a printed page: this shows the first image that is attached to that record.

|			
12/2005	1	Sumner Pridham	
		Property details	
13/12/2005	2	CHH	
		Covering letter	
29/1/1970	3	CHH	
		Land Registry K340185	
13/12/2005	4	CHH	
		Seller's Property Information Form	
13/12/2005	5	CHH	
		Fixtures Fittings Contents	

The images are this small because that is the size we used for the image field. Later on we'll show you a database where the image field is much bigger, but in this case we don't intend to read the documents when they're shown as part of a record, only when we are viewing them on their own.

Viewing images in the Image window

Hit F12, and you will see the first page of the document attached to the current record.
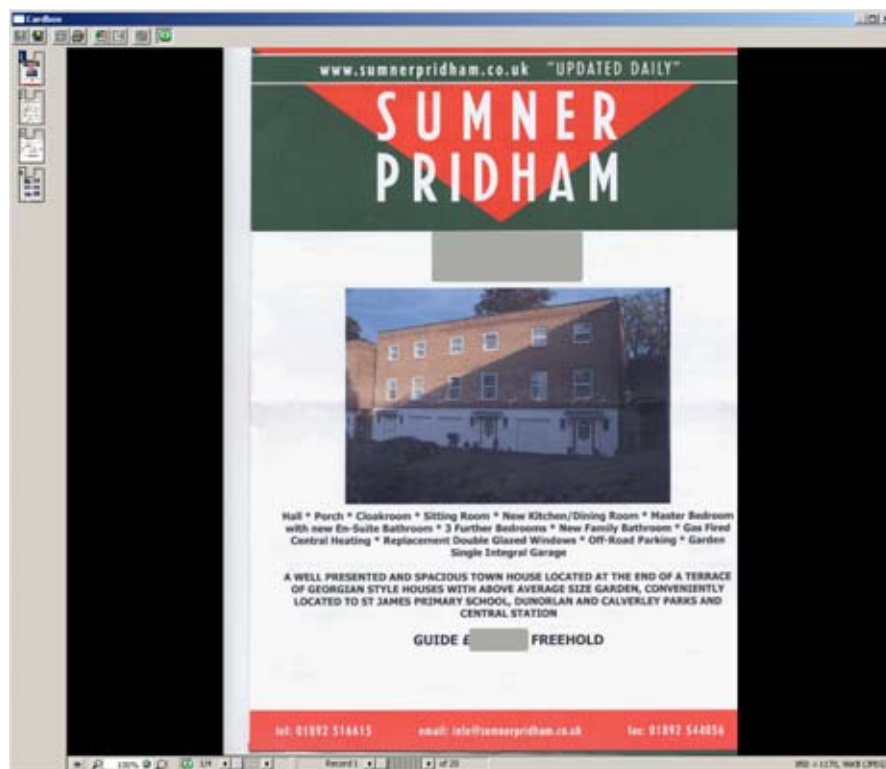
Multiple images and the image browse bar

On the left of the status bar at the bottom of the image window you'll see what looks like an ordinary Cardbox browse bar, except that it's shorter and the corrugations are a different shape. This is the image browse bar. It tells you which image you're looking at and how many images there are in the current record. You can drag the slider or click on the arrows to move forward and back through the images.

Using the keyboard to browse through images

Here are the keyboard commands for browsing through the images attached to a record:

Right arrow Down arrow	Next image.
Left arrow Up arrow	Previous image.
Home	First image.
End	Last image.

More about keystrokes for browsing

You have already seen that:

- When you are viewing records, the arrow keys browse between records.
- When you are in the Image window, the arrow keys browse between images.

What about browsing between images when you're viewing records, or browsing between records when you're in the Image window? Here are the remaining two rules:

- When you are viewing records, you can browse between images by holding down the Alt key and using the normal image-browsing keystrokes.
- When you are in the Image window, you can browse between records by holding down the Alt key and using the normal record-browsing keystrokes.

`🔍 100%  🔍`

Zooming in and out

The zoom control is at the bottom of the image window.

To zoom in: click on the large magnifying glass, or hold down the Ctrl key and press + (plus) on the numeric keypad.

To zoom out: click on the small magnifying glass, or hold down the Ctrl key and press - (minus) on the numeric keypad.

If you have a mouse with a wheel, you can use the wheel for zooming: hold down the Ctrl key and roll the wheel away from you to zoom out or towards you to zoom in.

The zoom menu

For more detailed control of zooming, open the Zoom menu by clicking on the white area between the magnifying glass symbols.

For browsing through documents the best settings are the following:

```
Fit Width
Fit Height
Fit In Window
```

Fit Width – makes the image as wide as possible while still fitting inside the width of the window: the result may be an image that is too tall for the window and needs to be scrolled vertically.

Fit In Window – makes the image as big as possible while still fitting entirely within the window, with no scrolling.

Image size, 100% – shows the image on the screen at the same size as it originally was on paper.

Try each of these settings and see which one you like best.

Background information: Pixel Count and Image Size

```
● Image Size
  Pixel Count
```

There are two ways for Cardbox to measure the amount by which an image is being zoomed. In the Pixel Count mode, a zoom factor of 100% means that Cardbox displays one pixel on the screen for every pixel in the image. In the Image Size mode, a zoom factor of 100% means that Cardbox makes one inch of the image take up one "screen inch" on the screen. The size of a "screen inch" is something that has been decided by the manufacturer of your computer screen: a common convention is to have 96 pixels per screen inch, which usually makes a screen inch rather more than 2.54 centimetres in size.

```
  50%
  75%
✓ 100%
  150%
  200%
  Custom...
```

The reason why these two zoom modes are different is that not every image is created with the same resolution as your screen: it all depends where the image has come from (scanner, camera, fax) and how it has been processed. Image Size mode is usually best for faxes and scanned documents and Pixel Count mode is usually best for digital photographs.
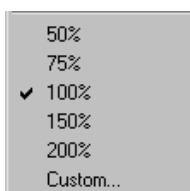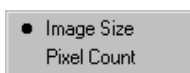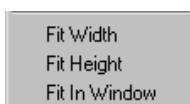
Scrolling

When you are viewing an image that is larger than the available space, you'll see scroll bars next to it. You can use the scroll bars to scroll a large image, or you can simply place the mouse inside the image, hold down the left mouse button, and drag the image in the direction you want.

If you have a mouse with a wheel, you can use the wheel to scroll vertically. To scroll horizontally, hold down the Shift key while you are using the wheel.

Thumbnail display

On the left-hand side, the image window can display miniature "thumbnail" versions of your images. You can use these to decide which image you want to look at, if you have several images attached to a record. Thumbnails are more useful for photographs than for scanned documents, because at thumbnail size all documents look much the same.

You can turn thumbnail display on and off by clicking on the button at the bottom of the image window, or by pressing the F4 key, or by right-clicking anywhere in the image window and selecting "Thumbnails" from the pop-up menu.

Searching the Property database

By now you know Cardbox well enough to be able to look at the screen and see the indexed words that you will be able to use for searching. You can also see that this database is still in a fairly rudimentary state. If it gets much bigger, it will need classification fields such as "Legal", "Works", "Guarantees", and so on. The design of Cardbox makes this very easy to do: you can add a new field to your format design at any time, and a combination of tagging and batch-editing will rapidly let you go through your existing records and fill your new field with meaningful information.

You've already read about tagging. We'll cover batch editing when we describe editing in general.

You can't search inside an image. To a computer, an image is just a pattern of differently coloured pixels. Even if the image happens to look to you like a printed page, to the computer it's just dots and can't be searched. If you want to scan documents and search for words within the scanned text, you need optical character recognition (OCR) software such as ABBYY FineReader.

When you have found your documents

You can print them. Cardbox lets you print individual images, or all the images attached to a record, or selected images (you mark the ones you want by marking their thumbnails in the Image window).

You can write them out to files and burn them to CDROM for a friend.

You can fax them. For Windows, faxing is just a different kind of printing.

You can send them as attachments to an email (Professional Edition only).

Finally, you can copy an image to the Clipboard for use by some other program.

Should you keep the original documents?

It depends. Some documents, such as leases or guarantees, are important and you should keep them. Others can be thrown away: if you ever need to refer to one of these, you can print it out from Cardbox.

For the documents you do need to keep, the nice thing about using Cardbox is that your physical filing system doesn't need to be very sophisticated: just number the documents, file them in numerical order, and store the numbers as part of your Cardbox record. You don't need to gather the physical documents into categories because all the categorisation and classification is done in Cardbox.

The Photos database

The Photos database is a sample database that has been used to index a collection of digital photographs.

The first thing you have to decide about a digital photography database is what it should store. Should it store the photographs themselves, or should it store pictures of those photographs?

Storing the photographs themselves – this is the simplest approach, because then the Cardbox images have the full quality of the original and you don't need to keep the camera's JPEG images as separate files. But digital photographs are large. The photographs in the Photos collection were taken by a Canon Ixus 50 digital camera, which on its 5-megapixel setting produces images that take between 900KB and 2.6MB of disk space. This means that an 80GB hard disk would hold from 30,000 to 80,000 photographs, but the crucial point is backup: a single 4.7GB DVD would only hold between 2,000 and 4,000 photographs. If you exceeded that limit, you would have to split the database file among separate DVDs, which would make life a bit more complicated.

Storing pictures of the photographs – by this, we mean storing the photographs in Cardbox at a lower resolution (for example, 800 by 600 pixels) and keeping the original JPEG image files elsewhere. The lower resolution is still good enough for a computer screen, and you'd only need to refer to the originals if you wanted to make prints or enlargements. You could accumulate your original JPEG files in a folder on your hard disk, and burn them onto a CDROM whenever you had enough files to fill the CD. You could allocate a field in the database to say which CD, and which filename, contains the original JPEG image if you want to print it or process it in Photoshop. Photo libraries often use this kind of approach because (with a careful choice of resolution) they can give away their entire collection as a database and then provide high-quality versions of the images that their clients ask for.

In the sample Photos database the pictures take an average of about 58KB each.

For the Photos database we've taken the second approach. It contains 74 pictures, and if we'd stored the original photographs in Cardbox the database would have come out at around 120 megabytes – we don't think you'd appreciate having to download or install a database that large, just so you can see how Cardbox manages pictures!

Opening the Photos database

If you have downloaded the Photos database into Cardbox's Samples folder, use File > Open and then the Samples tab. If you haven't, use File > Open and then the Server tab to open the database directly on the Cardbox Server.

What the Photos database contains

The database contains the following fields:

NUMBER – the number that the camera has given to this photograph. This also lets us work out the filename of the JPEG file that contains this photograph.

DATE – the date and time that the photograph was taken. The format may look a little unfamiliar but it lets the camera report the time to the nearest second.

CIRCS – the circumstances under which the photograph was taken: day or night, interior or exterior. You can design as many fields and codes of this type as you need to help you classify your collection.

WEB – a relevant web address, where one exists. These addresses are hotlinks and if you click on one, the page will open in your web browser.

WHERE, COUNTRY, SUBJECT – more information about the photograph. We've chosen not to specify the country if it is within the United Kingdom, but you can establish your own conventions.

There is nothing to stop you creating more fields. Examples include: the genre (scenery, architecture, action, portrait, food,…), the names or initials of people in the picture, the names or initials of people who have asked you for a copy of the picture.

Searching the DATE field

There are some useful wildcards that you can use when searching for dates in the high-tech date-and-time format:

- Searching for `21/7/2005*` or `2005.07.21*` will find everything on 21 July 2005, at any time of day.
- Searching for `8/2005*` or `08/2005*` or `2005.08*` will find everything in August 2005.

| 81 | 2005.07.19.08.44.53 | **EXT DAY** | http://www.apanemaresort.com/ |

Location: **Apanema** Resort Hotel, **Mykonos**　　　　Country: **Greece**
Subject: Breakfast
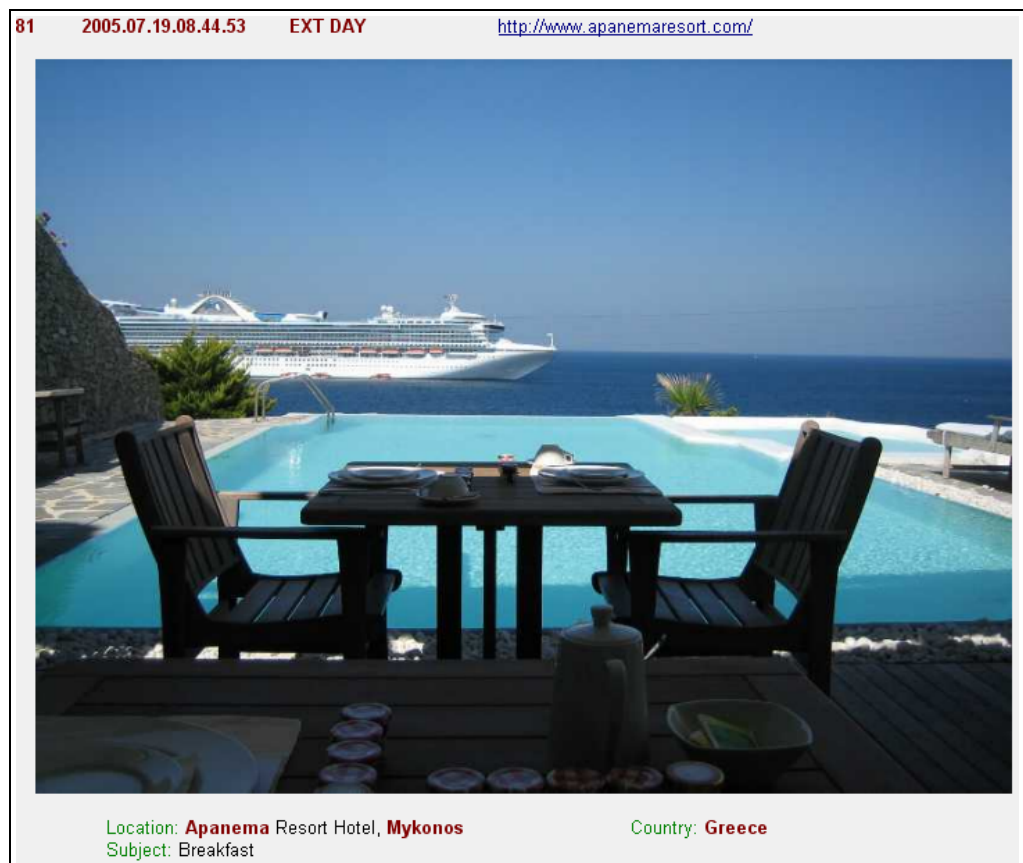
Viewing images on their own: the "Image Alone" view

When you want to take your laptop and show your photographs to your friends, you can do it easily with Cardbox: find the records you want, then hit F12 for the Image window, then move through your selection with Alt + right-arrow. But there is a snag: they'll see the status bar and the toolbar as well as your pictures.

If you want to see the pictures and nothing but the pictures, go into the Image window and either click on the Maximize button at the top right, or right-click on the picture and select "Image Alone".

Once you're in the Image Alone mode, you can get out of it by using the right-click menu, but the quickest way of all is just to hit the Esc key.

Adding and editing records

Now that you've tried looking into and exploring a Cardbox database, it's time to try adding and editing a few records. Once you've done that, we can move on to creating a database design of your own.

Before you start

Have a look at the Cardbox toolbar. Are the Edit Record and New Record buttons clearly visible, or are they disabled and displayed in shades of grey?

If you want to know why a toolbar button is disabled, move the mouse onto the button and wait a couple of seconds: Cardbox will tell you the reason.

If they're disabled then this means that your current database access is read-only. This usually means that the database is in the Samples folder, or that you're using a sample database on our Cardbox Server. But it could also mean that you need to install a licence into your copy of Cardbox.

Help > Help Points » 800

Whatever the reason, look at Help Point 800 to find out how to get to the point where you are allowed to edit.

Double-click = Edit

Edit > Edit Record
Ctrl + E

The simplest way to edit an existing record is to double-click on it. But you can also use Edit > Edit Record to edit the current record: this starts editing and positions you at the beginning of the first field.

Most of the business of editing records in Cardbox is like editing text anywhere else in Windows. All the normal features are there: typing, inserting, replacing, highlighting text, dragging and dropping, copying and pasting, and even a spelling checker.

Moving between fields

The order in which fields are visited by the Tab key is something that you set up when you design a format.

You'll see that the record you're editing is divided into separate fields. To move from one field to the next, press the Tab key. You can also click on the field you want to go to, or press Ctrl + G and select the field name from a list.

Indexing and unindexing text

The editing feature that you won't be familiar with from other Windows programs is the indexing and unindexing of text. When a field is first designed in Cardbox, you give it one of four indexing modes:

None – nothing is indexed.

All – everything is indexed.

Manual – to start with, nothing is indexed, but you can tell Cardbox to index particular words.

Auto – to start with, everything is indexed, but you can tell Cardbox not to index particular words.

You can usually see which words are indexed and which aren't because the indexed terms appear as bold text, or red text, or both. But this is simply because most people design their Cardbox formats that way: it is also possible to have indexed and unindexed terms looking identical. In that case you can see whether a particular term is indexed by moving onto it and looking at the status bar.

To index or unindex a word, move onto it and do one of the following:

These commands won't work in fields whose indexing is None or All, because in those fields the indexing is fixed and can't be changed.

- Tap the Ctrl key.
- Type Ctrl + I.
- Right-click and select "Indexed" from the menu that pops up.

You can index or unindex a whole series of words by selecting them all and then using one of the indexing commands.

File > Save
Ctrl + S

Saving your changes

File > Save stops editing and saves any changes that you have made.

Saving your changes as a new record

File > Save as New

This saves the record, with all the changes you have made, as a new record. The original record (the one that you started editing) is left unchanged. This is the traditional Windows method for creating a modified duplicate, but we strongly recommend that you use Edit > Duplicate Record instead, because it's much safer.

Adding a record based on an existing one

Edit > Duplicate
Ctrl + D

File > Save
Ctrl + S

Some databases are very repetitive and you often find yourself wanting to add a new record that's almost identical to one that is already there. To create a new record that resembles an existing one, go to the existing record and use Edit > Duplicate Record. This creates a new record just like Edit > New Record but instead of being blank, the record contains exactly the same data as the current record when you issued the Duplicate command. Now you can make any changes that you need and then use File > Save. The new record will become part of the database, and the original record will be left unchanged.

The Duplicate command is unique to Cardbox. It is a lot safer than just editing a record and using Save As, because there is no risk of you overwriting your original record by using the Save command by mistake.

Adding a blank record

Edit > New Record
Ctrl + N

File > Save
Ctrl + S

Edit > New Record creates a new, blank record for you to type into. When you have finished, use File > Save, and the record will become part of the database. As far as Cardbox is concerned, typing into a blank record is just like editing an existing one, except that the record is blank to start with: all the editing commands are the same.

Importing records from outside

If you have records in a different database, or even in a text file of a certain format (for instance, comma-separated) then you can import the data by using commands in the File > Import menu. These commands are sophisticated and we won't go into them here, but you can read more about them in the on-line help.

Editing a batch of records

Batch editing is a unique feature of Cardbox and it saves a lot of time. For example, when we put "Greece" into the Country field of the Photos database, we didn't edit the records one by one. Here's what we did instead:

1. Go through the records and hit the Tab key to tag the ones we want to edit.
2. Use Tag > Select to select the tagged records.
3. Use Edit > Batch > Edit (or Ctrl + B) to edit the first record.
4. Type "Greece" into the Country field.
5. Save.

… and Cardbox did all the rest for us automatically.

We did the same thing in many other cases: for example, to put "INT DAY" or "EXT NIGHT" into the Circs field.

Batch editing is useful without tagging as well. Suppose you have selected records for a mailing, and want to update a "date last sent" field to show what you have done. Batch Edit makes this quick and easy.

Batch Edit works very simply indeed. When you start it, you start editing the record you're on, but as well as doing what you say, Cardbox records all the editing actions that you take. When you save the record, Cardbox will go to the next record and play back all the actions it's recorded. The editing actions can be as simple or as complicated as you like: you can index a word, or you can erase a field and replace its contents, or you can do some major reshuffling of data.
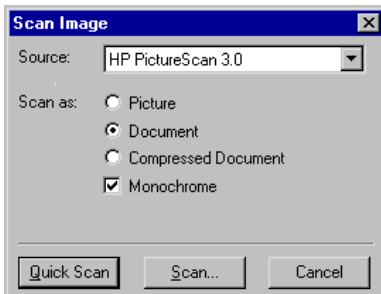
When you are batch editing you can tell Cardbox to pause after each record, so that you can decide when you want it to stop editing; or you can tell Cardbox to go straight ahead and edit the whole of the current selection automatically without pausing.

Scanning documents and photographs

If you're interested in making a database that stores documents or photographs, try opening the Property or Photos database, creating a new record and scanning some images into it. Cardbox can receive images from any scanner that uses the industry-standard TWAIN interface.

While editing a record, you can scan an image by right-clicking on the image field and selecting "Scan" from the pop-up menu.

While you are in the image window, you can scan an image by clicking on the toolbar button, or pressing Ctrl + N, or right-clicking anywhere in the image window and selecting "Scan" from the pop-up menu.

Source	If you have more than one TWAIN device (for example, a scanner and a camera), then choose which one you want to use.
Scan As	This option helps Cardbox to negotiate the correct scanning mode and resolution with the scanner.
	Picture is a continuous-tone image such as a photograph.
	Document is a printed or handwritten document, or a line drawing.
	Compressed Document tells Cardbox that this document will be stored in Compressed format, which is slightly fuzzier but uses a lot less disk space.
Monochrome	Set this option if you want the scanner to ignore any colour when scanning the image.

If you press the Quick Scan button, the scanner will start at once. It will scan one page, and then you will be returned to the Scan Image window. You can then change the paper and press Quick Scan again, or you can press Close to return to Cardbox.

Quick Scan uses standard default settings for things like the scanner resolution (dots per inch). To have detailed control of the settings, use the Scan button instead of Quick Scan.

Importing photographs from a camera

If you have a digital camera then you may want to try how Cardbox works with it. Again, open the Property or Photos database and create a new record, so that you have somewhere to store the images you import.

When you take photographs with a digital camera, you normally have two options for getting them into your computer: you can take the memory card out of the camera and plug it into your computer, or you can plug the camera directly into the computer.

In both cases your photographs will normally end up looking like files inside a folder in Windows. Here are the commands for importing image files into Cardbox:

While editing a record, you can read an image from a file by selecting the image field and using Edit > Insert Object, or by right-clicking on it and selecting "Load From File" from the pop-up menu.

While you are in the image window, you can read an image from a file by clicking on the toolbar button, or pressing Ctrl + R, or right-clicking anywhere in the image window and selecting "Load From File" from the pop-up menu.

Importing batches of images

If you have the Professional Edition of Cardbox, it is possible to write macros that read every image file in a given directory. We used one like this to import the images for the Photos database: it automatically resized the images for us and even extracted the date and time that the photograph had been taken.

Options when scanning and importing

Quality: the Store Compressed option

After you've scanned or imported an image, right-click on it and you'll see an option called Store Compressed. Turning this on reduces the amount of disk space the image will need, by reducing the image quality slightly. The best way of assessing this option is to try it out. Most of the images in our two sample image databases were stored with Store Compressed turned on.

If you look at the second record in the Photos database (the picture of a single windmill) you will see that it has two images attached. The first is stored with Store Compressed, the second isn't. The disk space used is 41KB and 66KB respectively. You have to look very hard to see the differences between the images: try viewing them in the Image window and look at the detail in the bottom sail of the windmill, near the horizon.

Size: the Override Size option

By default, Cardbox stores an image the size it actually is: an image 2048 x 1536 pixels will be stored as 2048 x 1536 pixels. With photographs especially, you may want to reduce the size of the image so that it takes less space on the disk. To do this, right-click on the image and select "Override Size" from the Preprocess menu. If you need help with the options for this command, press the F1 key.

Image rotation

You can also rotate an image if it happens to have come out upside down or sideways: again, use the Preprocess menu. You won't need to do this very often if you have a modern digital camera that uses the Exif specification, because that notes the orientation of the camera (vertical or horizontal) when the photograph was taken and Cardbox adjusts the picture on the screen accordingly.

Formats and format design

So far you've learnt how to look at a Cardbox database, search it, and add or edit records. All that is left now is to understand how the underlying formats work, so that you can design databases of your own or modify an existing design.

Looking at a format

Open the Contacts database and view it in its native format (use View > Change Format if you're not already in the native format).

Edit > Format > Edit
Ctrl + Shift + E

Now use the Edit Format command. You're not actually going to make changes to the format, but this is the best way of seeing what the format contains.

You can see that the format contains items corresponding to what you see on the screen when you look at a record: fields, captions, lines and boxes. Each of these things is a separate item in the format: you can double-click on it to find out more about its properties.

Try this now. If you want to know what the properties mean, press F1 while you're in the Properties window.

File > Quit
Ctrl + Q

When you've finished exploring, quit without saving the format (this is so that you don't make changes by accident).

Have a look at other formats in the same way. You'll find the Demonstration Letter format interesting because it contains a new kind of format item, a "merge block". Merge blocks combine fields and words into a single piece of continuous text, ideal for mail-merging. The Label format also uses a merge block to combine fields into a single item.

There are two item types that aren't in our sample databases. The Graphic type puts a picture or a logo in a format – it's different from an image field because the graphic isn't part of the record data and appears the same in every record. Graphic items are good for corporate logos and letterheads.

The Pushbutton type puts a pushbutton in a format – clicking on the pushbutton will perform an action that you define when you create the pushbutton item. Pushbuttons are closely associated with macros and programming, which are features of the Professional Edition of Cardbox.

Adding fields to the native format

The Property database that we've given you is fairly simple. Let's add a couple of fields to it, to divide the documents into categories and indicate which ones we've filed and which ones we've thrown away after scanning.

Start by opening the Property database and making sure you're in the native format. Then do Edit > Format > Edit (or use Ctrl + Shift + E, which is a very convenient shape for a shortcut).

Inserting a field in the native format

Insert > Field
Ctrl + F

If you don't get the field's position exactly right, don't worry: we'll show you how to sort this out in a minute.

Inserting a field into the native format effectively creates it in the database.

1. Do Insert > Field. The mouse cursor turns into a hollow square. Move the mouse to just below the start of the SUBJECT field, press the mouse button, hold it down, drag the mouse to the right until the new field is about as wide as SUBJECT, then release the mouse button.

2. Cardbox will ask you what name you want to give to the field. Type CLASS.

3. The Field Properties window will open. Type "Classification: " into the Caption box (type a colon and a space after the word, just as we've shown you). Set the index mode to All.

File > Save
Ctrl + S

Now save the native format and look at what you've done.

You'll see that every record contains a new field, just below the existing SUBJECT field. The new field is blank, of course, because you haven't put any data into it yet.

Putting data into the field

We're not going to help you with the really hard bit, which is to decide what classification codes you'd like to use. It's up to you to decide how you want to categorize your documents, because it all depends on what sort of documents you want to store. One example might be House, Building, Utilities, Legal, Insurance, Car, Health.

Remember that you can put documents in more than one category at once if you want to. For example, you might mark a particular document as Car Insurance, in which case you'd find it if you searched for "Car" (along with the original brochure and all your maintenance records) and also if you searched for "Insurance" (along with house insurance, travel insurance and life insurance). If you wanted to search for car insurance documents *only* then you could enter a Select command with "Car insurance" and turn on the Match All option so that Cardbox finds only the records where *both* those words occur.

Whole books have been written about household filing systems, and we're not going to summarise them here!

One of the great things about Cardbox is that you can always "get it wrong first time". If you find that you need an extra category, think of a code and use it. You can tag and batch-edit to add the new category to any existing documents that need it, or you can batch-edit and search-and-replace if you want to change the name of an existing category. Once you've got a hundred or so documents in your database you'll find that you've got the whole classification scheme worked out the way you want it.

Radio buttons and check boxes

You could follow the example of the Contacts database and display your Classification field as a set of radio buttons or check boxes – even as a drop-down list. Whether you do this depends on your temperament. Using radio buttons (etc) means that you pre-define, in your format, what codes and categories you are going to use. You may welcome the guidance and discipline that this gives you when you're entering data; on the other hand, you may find it irksome to have to edit the format if you decide that you want to add a new category. It's up to you.

More changes in the native format

Edit the native format again.

Adding a caption

It looks a little silly to have the Classification field with a caption when the Subject field doesn't have one. So double-click on the SUBJECT field, and type "Subject: " into the Caption box (remembering to include the colon and the space after the colon).

Moving a field to make room

Now we're going to add a field just after NUMBER, to say whether we've kept a paper copy of the document. First of all we need to make some room by making WHO a little bit shorter.
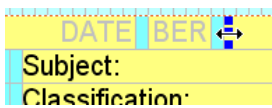
Click on the WHO field and you'll see some square blue blobs appear: these are "sizing handles". Move the mouse onto the middle one on the left-hand side, press the mouse button and drag to the right until the status bar (at the bottom right-hand corner of the screen) says "Column=30". Then release the mouse.

If you find this rather fiddly, try zooming in on the display by using the Zoom In button on the toolbar. Or use the keyboard instead of the mouse: hold down the Shift key and press the left arrow 10 times to make the WHO field smaller, then release the Shift key and press the right arrow 10 times to move the field to the right.

Adding another new field

1. Do Insert > Field. Move the mouse just to the right of the NUMBER field, press the button, drag until it's just to the left of the WHO field, release the button.

2. Give the field the name FILED. In Field Properties, type "Whether a paper copy is filed" into the Description box, set the index mode to All, and select "Check boxes" from the View list.

3. Press the Set button next to the View list, and type `Y=Filed` into the empty box that appears. Press OK, then OK again. This has told Cardbox to create a check box called "Filed" on the screen, and to store Y in the FILED field whenever that check box is turned on (the online help would have told you this if you'd pressed F1 before typing).

Changing the order in which fields are visited

When you edit a record, the Tab key takes you to the next field. What "Next" means depends on how you have defined the field sequence when you designed the format. Before you save the native format, let's have a look at the sequence and change it if necessary.

1. Do View > Sequence of Fields (alternatively, double-click on the format background and open the Field Sequence tab in the window that appears). You'll see a list of fields that shows the order in which the Tab key would visit them when editing.

2. Click on FILED, to highlight it, and then click on the up arrow at the bottom of the field list, until FILED is between NUMBER and WHO. Then click on OK.

Now save the native format and look at what you've done.

You'll see that every record contains a check box between the number and the WHO field. The check box is blank because you haven't put any data into it yet.

Edit a few records and turn on the check box in some of them. This will come in useful in a minute, when we look at viewing the data in an alternative format.

Creating an alternative format

Let's create a format that is just a summary list of documents, one line per document with a heading at the top of the list. You might use it if you wanted to print out an inventory of the papers you hold on a particular subject.

Edit > Format > New
Ctrl + Shift + N

Edit > Format > New creates a new, blank format as a basis for your design.

Inserting the fields

Use Insert > Field to insert fields as follows:

NUMBER – columns 1 to 5.

FILED – columns 6 to 7.

DATE – columns 9 to 20.

CLASS – columns 22to 31.

WHO – columns 33 to 47.

SUBJECT – columns 49 to 86.

Not giving FILED a View setting means that it'll display the single letter Y if the check box was turned on and nothing at all if it wasn't. This saves space on the screen and in the printed list.

You'll see that Cardbox asks you to pick a field name immediately you start inserting (it gives you a list of available names). This is because alternative formats can only contain fields that already exist in the native format. For the same reason, you'll see that most of the options in Field Properties are greyed out and unavailable. In fact, in this format we don't want to set any options anyway: there are no captions, and we don't even give a View setting to the FILED field.

Creating the heading

We want to have a heading in this format, so we need to make some room for it. Do Insert > Headings/Footings > Page Heading and you'll see a subtle change on the left of the window. Instead of a single row number (1) you now have two row numbers, H1 and 1. Anything you put into row H1 will be part of the heading.

Insert > Fixed Text
Ctrl + T

Do Insert > Fixed Text. The mouse cursor turns into a hollow square. Move the mouse to column 1 of the heading, just above NUMBER, and click once. The Text Properties window will open: type "No./Filed" in the Text box.

In the same way, put "Date" into column 9, "Category" into column 21, "Who" into column 32, and "Subject" into column 48.

We'll want to see the heading on the screen as well as on any printed output, so double-click on the format background, and turn on "Screen display also shows page headings" in the General tab of the Format Properties window.

This format is meant for display rather than editing, but just in case you ever do decide to use it for editing, you can use the Field Sequence page in Format Properties to reshuffle the fields so that they are in the same order that's visible on the screen.

As an exercise you can also change the appearance of the format, either with View > Appearance or by using the Appearance tab in Format Properties. Change the "Normal" font to Arial and the background to white. Change the "Indexed" text to be black and not bold. Change the "Fixed text / Captions" text to be dark blue, bold, and 8-point in size, with a white background.

Finally, do File > Save and give "Summary" as the name of the new format.

What the result looks like on the screen

No./Filed	Date	Categories Who		Subject
2 Y	13/12/2005		CHH	Covering letter
3	29/1/1970		CHH	Land Registry K340185
4	13/12/2005		CHH	Seller's Property Information Form
5	13/12/2005		CHH	Fixtures Fittings Contents
9	13/12/2005		CHH	Additional enquiries
13	22/12/2005		CHH	Additional enquiries
15	6/1/2006		CHH	Mortgage deed covering letter
18	30/1/2006		CHH	Completion letter
20	1/2/2006		CHH	Completion overpayment

To get this list, we right-clicked on the "Who" column and typed "CHH" as the text to be searched for.

Another way of creating alternative formats

You may well find that you already have an alternative format similar to the one you want to create. In that case, use View > Change Format to get to that format, then do Edit > Format > Duplicate. This will create a new format for you, just like Edit > Format > New, but the new format will start off as an identical copy of the existing format. This saves a lot of time and trouble, especially if you are creating mail-merged standard letter formats where one format is much like another.

Creating a new database

By now you have learnt everything you need to know to start creating databases of your own. Here's a summary of how it happens:

1. File > New Database.

2. Edit > Format > Edit.

3. Add some fields to the format.

4. File > Save to save the format.

5. Edit > New Record to add your first record.

Of course we can't summarise the whole of the 300-page Cardbox Book in thirty-odd pages, but by now you should have a good feel for what Cardbox can do for you, and the best thing you can do now is to play with Cardbox on your own and learn your way round in greater detail.

Read The Cardbox Book if you have it, or the Home Edition manual, which has the same contents. Use the Cardbox help file for more detailed guidance.

If you don't have one of our books then go to the Gallery section of the Cardbox web site: in "The Cardbox Gallery" you'll find a document called Inspiration, which shows you how other people are using Cardbox and gives you ideas for applications of your own.

Look through our sample databases as well. If you find one that you like the look of, you're welcome to make a copy and start your own design on that basis.