Data Crow

Version 2.2

http://www.datacrow.net

Document version: 4.2
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Last Update: 12 February, 2006

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1.1. About Data Crow

There are many programs that claim to have a nice database to put your music in, and there are other programs that allow you to store your audio CD information, but Data Crow has it all under one roof!

Data Crow helps you organize your software, music, book, and movie collections by using online databases from Amazon, IMDb, and freedb, as well as the tag information stored within your files.

We think you will find Data Crow easy to use and a great all-rounder!

For information or support, you can contact us here:

Information: info@datacrow.net
Support: support@datacrow.net
Website: http://www.datacrow.net

1.2. Starting the application

By default Data Crow uses an internal database named “dc”. For whatever reason, an additional database can be created. To do this, start Data Crow with the database name as a parameter:

Java –jar datacrow.jar <database name> *or*
datacrow.exe <database name>

By default, Data Crow uses the previously used database.

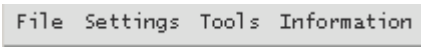
Note: in older versions it was possible to use a database server. This not supported as of version 2.0.

2. Main window

The main window contains a menu bar, toolbar, module list, status bar, and a pane where new and existing items can be viewed.

Menu bar

The menu bar provides access to all the functionality available for the currently active module.



(See Menu bar for detailed information about the menu bar.)

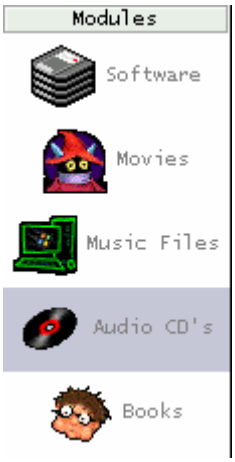
Tool bar

The tool bar provides shortcuts to all the same functionality as the menu bar. You can disable the text labels by right-clicking on the toolbar and selecting “Show labels”.

(See Toolbar for detailed information about the menu bar.)

Module list

The module list shows the modules you can work with. You can switch between modules at any time (even during imports). The active module is highlighted.



(See Modules for detailed information about the menu bar.)

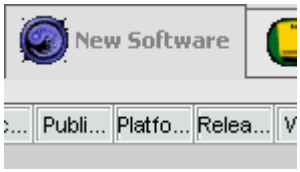
<Item> tab

(Note that "<Item>" can represent a software, movie, music, book, or CD item, depending on the module that is currently active.)

Existing items can be displayed in this pane and updated or deleted. Search results are also displayed here.

New <item> tab

Add new items to the database. New items can be imported from the internet or extracted from files or CD drives.

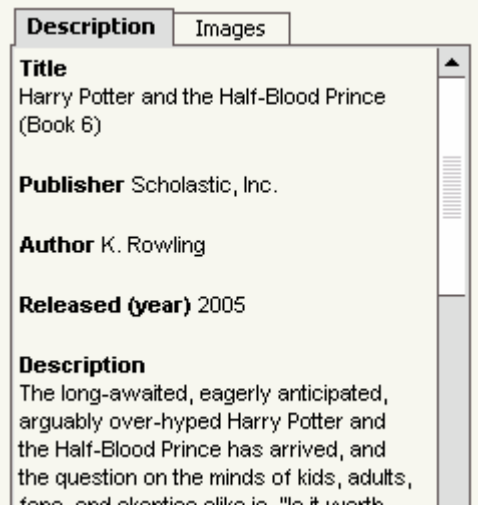


Block note

Write annotations, remarks, or reminders. The contents are automatically saved.

Quick View

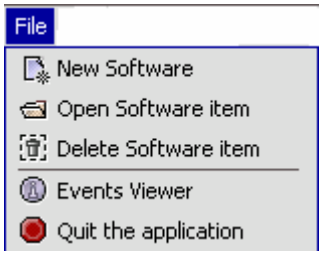
The quick view shows detailed information on the currently selected item



3. Menu bar

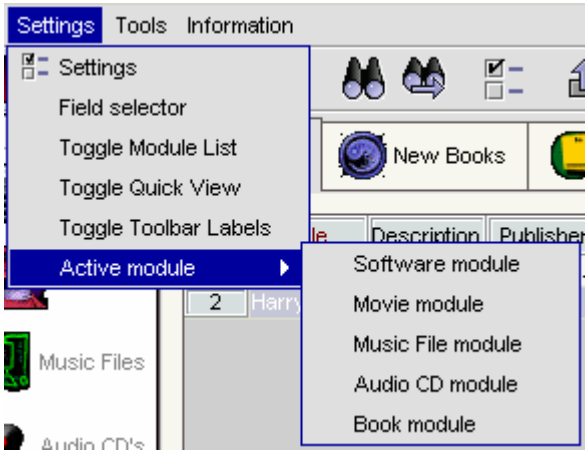
There are four main menus: Files, Settings, Tools, and Information.

File



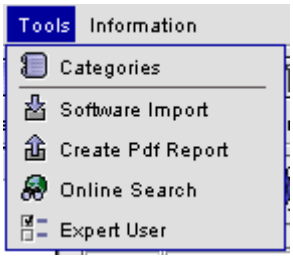
Items can be created, deleted, or opened. You can also view events or quit the application.

Settings



Display and input settings can be changed. The module list, as well as other parts of the UI, can be made visible or hidden.

Tools



The tools available here depend on the module that is active. Some tools, such as “Item import”, are common to all modules

Information

Contains a link to the About dialog and to the internal Help system.

4. Toolbar

Item Wizard
Opens the wizard for creating a new item.

New
Opens the form for a new item. The new item can be saved after the information has been filled in.

Open
Opens the selected item.

Save
Saves the selected item.

Save all
Saves all new or modified items.

Remove / Delete
Removes a new item (not yet saved) or deletes an existing item.

Find
Opens the Find dialog where you can define search conditions.

Find Again
Searches using the conditions specified in the last search.

Settings
Opens the settings dialog.

Report
Opens the reporting dialog

Import
Opens the import dialog where you can import data from CD or hard disk.

Online Search
Searches the online databases of Amazon, IMDb, and freedb.

Event Log
Shows system events.

Help
Opens the Help system.

About
Displays information about Data Crow.

5. Modules

You can organize your software, music, movie, and book files by using the corresponding Data Crow modules. The following modules are available:

Data Crow modules

Module	Supported file formats	Online updates	File parsing
Software	All	Yes (Amazon)	No
Movies	DivX, XviD, MPEG	Yes (IMDb)	Yes
Music Files	OGG, FLAC, MP3, MP4, WAV, APE, ASF, MPC	No	Yes
Audio CDs	All	Yes (freedb)	No
Books	N/A	Yes (Amazon)	No

6. Settings

The Settings menu allows you to change the general behavior of the application. For example, display options (such as the background color), or data input options (such as required fields) can be found here.

These settings are stored in the “datacrow.properties” file in the Data Crow directory of your installation.

6.1. General settings

Maximum of retrieved items

The maximum number of items that will be retrieved after a search. The default is 100 items. Setting a higher number here can impact memory usage if you also specify extensive search conditions.

Check for required fields upon saving

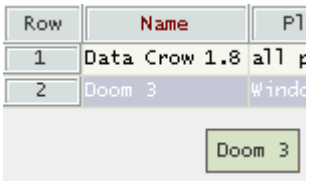
Check if all the required fields have been entered. If not, the item is not saved to the database and Data Crow displays a message showing which fields should be filled in.
This option is enabled by default and we do not recommend turning it off because it could cause data inconsistencies. However, we *do* recommend that you define your own required fields (see Required field settings).

Check for value uniqueness upon saving

Data Crow will check if the item is unique before it is saved. Uniqueness is determined by the required field values. If the item is not unique it will not be saved and a message will be displayed.
This option is enabled by default and we do not recommend turning it off.

Show tool tips for tables

Toggle the tool tips for values in the tables.



Ask to close server on exit

When closing the client, Data Crow will ask if the server should be closed as well.

Perform a blank search on startup

Start a search without any search conditions when starting Data Crow.

Show hidden fields in item form (ignore field selector setting)

Turning it on means that fields not shown in the table are shown in the item form. In older versions of Data Crow, hidden fields would remain hidden throughout the whole application. By default this option is off.

6.2. Required field settings

Required fields can be set for each module. Set the “Required y/n” value to “Yes” in the required fields table if a value for that field must be input.

6.3. HTTP Settings

General HTTP settings can be specified here.

Proxy Server port

If you are behind a proxy server, you must specify the proxy server port number. By default, the port number is set to 0 (no proxy). Most proxy servers will be set to port "*8088*".

Proxy Server name

The name of the proxy server must be specified when you are behind a proxy server.

Proxy username

If needed, input the username needed for the entered proxy server.

Proxy password

Enter the password belonging to the given username.

Browser path

Specify the browser which should be used by Data Crow when opening hyperlinks. By default Data Crow will try and find the default browser for the current environment.

6.4. Background color

The background color is set by moving the slider on the color panel and clicking in the color palette. Don't forget to press "Save"—otherwise the selected color will not be saved for the next session!

6.5. Fonts

Select a different font or modify the current font. Changes take effect after restarting Data Crow.

6.6. Table Colors

Change the display colors, including the row selection color and the colors of even and odd rows.

7. Tools

7.1. Software categories

Software can be categorized via the “Software type” list box. Some categories are pre-defined (mostly related to gaming). To add or modify categories, select the “Categories” button from the menu bar and enter new data or modify existing categories.

7.2. Import

Because Data Crow represents items that exist in the real world (like audio and software CDs), the application needs to make contact with these real items. The import tool allows you to do this. For more details, see Importing data.

7.3. Online Search

Update an existing or new item with information retrieved from the internet. This is explained in more detail in Searching the online databases.

7.4. Expert User

The Expert User tool includes the System Information and tools tab, and the SQL Tool tab.

8. Creating new items

New items can be added by selecting the tab “New <item>” (where <item> refers to a software, music, movie, or book item, depending on the active module).

By default, the table is empty (no items are present). To enter a new item, press “Add item”. An empty row is added to the table. You can enter the data either directly into the row or use the item form.

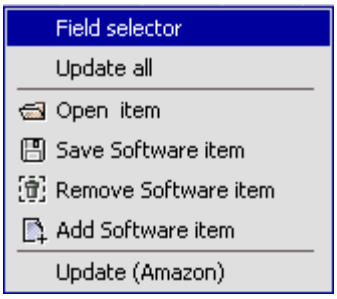
8.1. Creating a new item

There are several ways to create new items:

- Use the item wizard
- Open the “File” menu and select “New <item>”. This will open the item form. You can either type all the values or use the online updating function
- Press “Add item” in the “New <item>” tab and enter the values
- Start the CD Import dialog (see Importing data)
- Search an online database. (For Audio CDs, see Searching online databases (Audio CDs) and Importing data)

8.2. Using the right-click menu to create items

The right-click menu in the “New <item>” tab offers the following options:



Field Selector
Opens a dialog that allows you to select the fields to be displayed.

Update all
Sets the selected field(s) in the table to the specified value(s).

Open
Opens the item in the item form.

Save
Saves the selected item(s) to the database.

Remove
Removes the selected item(s) from the table.

Add
Adds an empty row to the table

Update <online database>
Updates the selected item(s) with data from an online database such as Amazon or IMDb.

9. Item wizard

For every module an item wizard is available. Via this wizard new items can be created. The wizards combine the internet search functionality and manually changing the information of the item. The wizard comes with help for each step and is not further described here.

10. Viewing and modifying items

Items are displayed in a table in the main pane. One row represents one item. Right-clicking on an item opens a sub-menu with further options. Items can be deleted, updated with an online database, or opened. Items can also be directly modified within the table.

To view all items in a module, select that module and then perform a Find where all the search conditions are blank. The result will return all items stored under that module.

10.1. Viewing & changing existing items

To view an item already stored in the database, open the module that contains that item and perform a search using the Find function.

An item can be opened by either double-clicking on the item or using the right-click menu. An item is opened in the item form.

10.2. The item form

The item form shows a single item in the database. The form allows you to create, update, or delete an item. To modify an item, select the values and update them. Note that double-clicking on a large text field opens the text in a larger window.

Changes to an item can be saved by pressing the “Save” button. Pressing the “Close” button discards any changes (without warning!) and closes the form. To delete an item, press the “Delete” button.

The item form consists of one or more tabs–each image belonging to an item is shown in a separate tab. Pictures (such as screenshots) and Children (such as, for example, with audio CDs) are also shown in a separate tab. Images can be deleted or replaced by double-clicking on the current image. A window appears where you can select a new image or delete the current image.

Items can also be updated with data from an online database (see Searching the online databases).

10.3. Updating data directly in the table

Instead of opening an item in the item form, you can change, delete, or update data directly in the table. To edit a cell in the row, place the cursor in the cell and press F2. You can cycle through the rows using the arrow keys. Changes are saved by using the right-click menu or by pressing the “Save changes” button.

10.4. Using the right-click menu to edit items

All actions in the table are available from the right-click menu. Some actions, such as “Open item”, can be applied to single items only, while other actions can be used on multiple rows.

Field Selector

Opens a dialog where you can select the fields to be displayed. The fields not shown will still be maintained.

Update all

Sets the selected field(s) in the table to the specified value(s).

Open

Opens the selected item (in the item form).

Save

Saves the selected item(s) to the database.

Delete

Deletes the selected item(s) from the database.

Update <online database>

Updates the selected item(s) with data from an online database such as Amazon or IMDb.

Create PDF report

Creates a report for the displayed / retrieved item(s)

11. Searching the Database (Find)

Searching is carried out using the “Find” function, which is available from the toolbar. You can search for items using various combinations of conditions and search options to filter the results.

The results of a search are displayed in the “<item>” tab. To clear the results from the table, press the “Clear” button.

Note: You can only search for items in the active module. Thus, if you want to search for a particular movie, the Movies module must be active.

11.1. Search conditions

Keywords can be entered in any or all of the search fields. You can enter more than one value in a field by separating keywords with the ‘%’ character. For example, the search condition “easy%creator” will retrieve all items which contain “easy” AND “creator” (note that there are no spaces between the ‘%’ character and the keywords).

11.2. Search options

Comply with all search conditions

Specify if the results must comply with all the search conditions or with any one of the search conditions.

Example: the following search conditions have been specified:

name = test, location = CD1

If the “Comply” option is checked, the result will return items which contain the name “test” AND the location “CD1”.
If the “Comply” option is not checked, the result will return all items which contain either the name “test” OR the location “CD1”.

Match exact search conditions

If this option is enabled the resulting items must comply with the exact search conditions. If the option is disabled the search condition is used to see if the field contains the value.

Example: the following search condition has been specified:

name = DOOM 3

If this option is checked then only results with “DOOM 3” in the name field will be returned. If the option is unchecked then all items with “DOOM” or “3” in the name field will be returned.

Order by

Orders the results by the selected field.

12. Searching online databases

Data Crow can save you time by retrieving information about an item from an online database such as Amazon, IMDb, or freedb. (For updating audio CD information online, see Searching online databases (Audio CDs).)

The option to update a new or an existing item using an online database is available by using either the item form, the tool bar, the menu bar, or the right-click menu. Online databases can also be used to add new items to the database.

There are two important settings:

Overwrite existing values

Overwrites the item with the values you choose. If you do not select this option, only empty fields are updated.

Optimize For Broadband.

When selected, better images are retrieved for software items. If the waiting time is acceptable, select this option!

(The values you select will be remembered the next time you run Data Crow.)

12.1. Searching

When the option to update has been selected, the search form is opened. A search is started immediately if the name of the software or the title of a movie has been filled in. Otherwise, you have to start the search manually.

If the result you are looking for is not shown, try using a different search condition.

12.2. Update

If the desired result is displayed, select the item and press “Update”. The selected item is updated with the new information.

12.3. Add as new

If no item was selected for updating, “add as new” is the only option available. (This option is also available when updating an item.)

12.4. Stopping the search action

To stop the current search, press “Stop”. The current search action is cancelled. When more then one item is selected for updating, press “Close” to stop all updates.

13. Searching online databases (Audio CDs)

Retrieving online information for audio CDs works the same as described in the previous chapter with the exception that it also supports extracting information from the audio CD itself so that a precise online search can be performed.

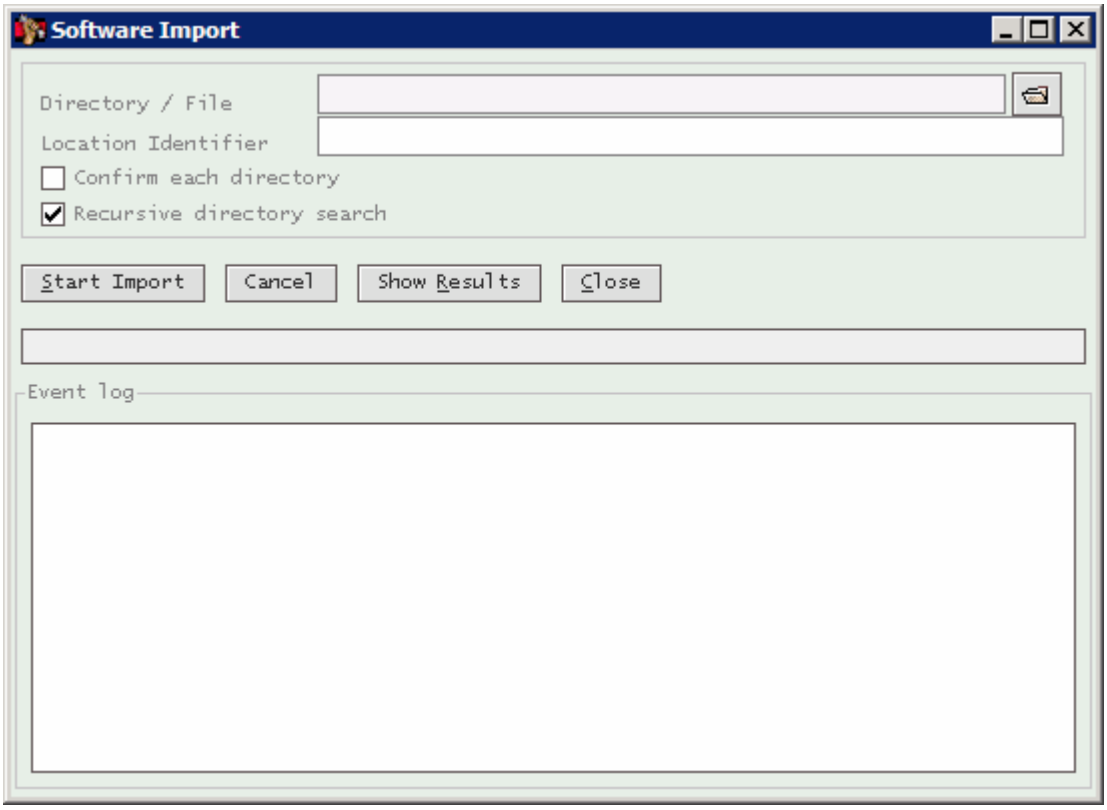
To get information for an audio CD, you first need to insert the audio CD in your CD drive. When the desired result has been found, select it and press “Add as new”. The Audio CD is then shown in the “new <item>” tab. It has not yet been saved to the database—when you are satisfied with the details, press “Save”.

You might be wondering why the result is not saved directly to the database on transfer? We did this for two reasons: 1) the new item table is always used as a holder for new items; 2) the new item table has extra options that can be used before you save the item.

Note: Audio CDs must be inserted into the primary CD drive of your machine!

14. Importing data

Using the import feature you can quickly retrieve information from your CD or hard drive. This feature is found in the “Tools” menu under the name ‘X import’ (where ‘X’ is the module name).



Directory / File

The directory from which data will be extracted or a single file.

Location Identifier

The name of the CD or the location of the CD.

Confirm each directory

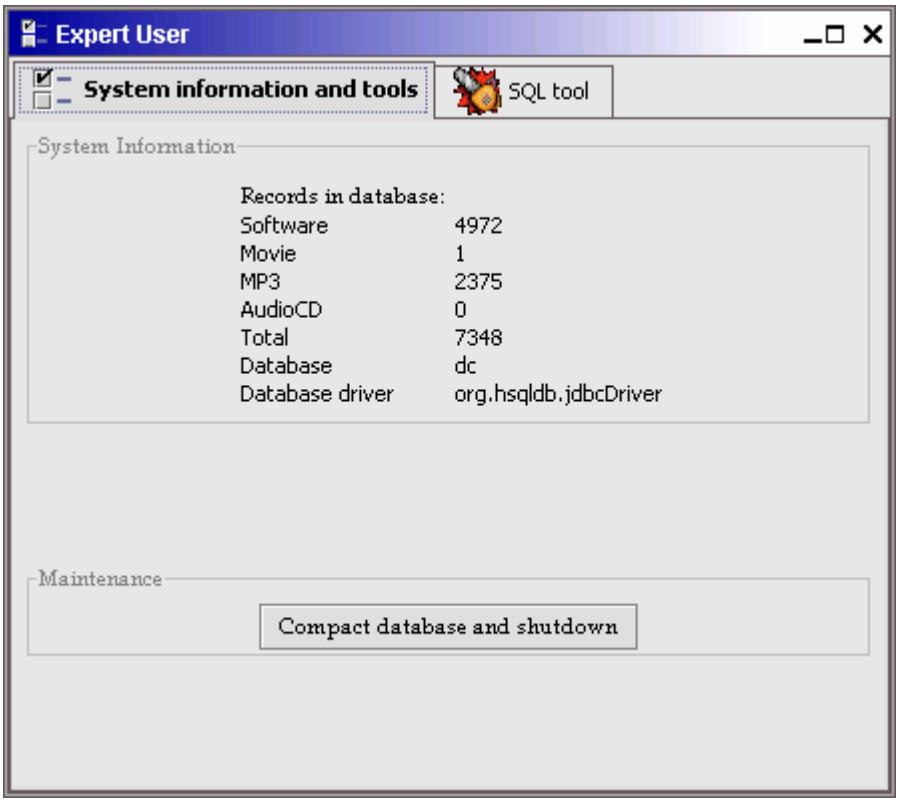
For each directory it encounters, Data Crow will ask you if the data from this directory should be read or not. If you answer No, the directory name itself will be registered, but not the files it contains. Answering Yes imports the files and sub-directories from this directory.

Recursive directory search

Search the specified folder and its sub folders

15. Expert User Tool

The expert user tool shows system information, contains maintenance tools, and offers a direct connection to the database.



15.1. System information

The system information dialog shows how many items are in the database per module, the database name, and the driver that is used to connect to the database.

15.2. Maintenance

The maintenance tool “Compact database and shutdown” is a direct call to the HSQL database engine. The following information about this tool is reproduced from the HSQL database website:

“Writes out a new .script file which contains the data for all the tables, including CACHED and TEXT tables. It then deletes the existing text table files and the .data file before rewriting them. After this, it backs up the .data file in the same way as normal SHUTDOWN. This operation shrinks all files to the minimum size”

15.3. SQL tool

The SQL tool offers a quick and direct way to manipulate data in the database. It overrides all checks on data so it should be handled with care.

If you're not familiar with SQL, you'd be better off not using this tool as you might make unwanted changes.

Creating and executing an SQL statement
Enter an SQL statement in the "Query input" field and press "Run" to execute the statement. Errors will be shown if the query is incorrect (these messages are generated not by Data Crow but by the database engine).

Previously-executed statements can be retrieved from the "Prepared SQL statements" list box. You will see that a couple of predefined queries are already in there.

The result of a select query is shown in the "Query result" table.

16. Block note

The Block Note tool can be used to maintain a ‘To do’ list or write other remarks. It’s very straightforward!

(Note that the content of the block is the same for every module).

17. Reporting

The reporting tool creates PDF files based on items retrieved via a search. There are two types of reports; a list report and the card report. The list report is, as the name indicates, a listing of the items whereas the card report shows detailed information on each item. Below there are two examples shown. Note that all is customizable; from the data itself (ordering, including / excluding fields) to the way it is represented (background color, text color, fonts, alignment, etc).

List report example

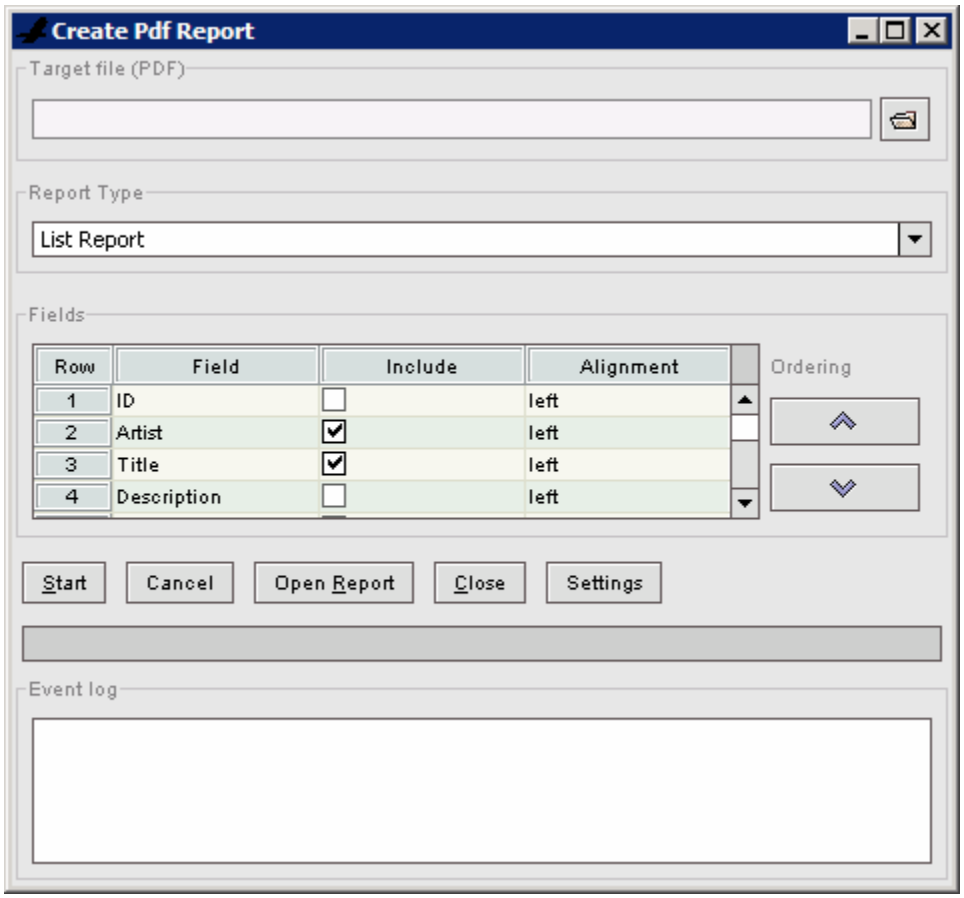
Artist	Title	Picture Front	Location
Offspring , The	Americana		136
Moby	Animal Rights		191
Counting Crows	August And Everything		54
R.E.M.	Automatic for the people		187

Card report example

Description	As well as recreating off road racing, this game has considerable capability to upgrade your vehicle. There are four choices of vehicle on offer, each of which has its own weight/top-speed/build strength and so on, and thus is suited to different circuits. You can also buy upgrades and repairs, including carrying some spares. There are four completely different types of course, each taking place on a different surface - Mud, Ice, Desert and Mountains. Each of these is littered with hazards, which can either be painstakingly avoided, or driven through (with the resultant risk of damage).
Name	4x4 Off-Road Racing
Released (year)	1988
Software type	Race
Rating	

17.1. Creating a report

Via the reporting dialog, reports can be generated. The report dialog can be started from the menu bar (Tools > Create Pdf Report) via the toolbar ( ) and via the right-click menu. The dialog offers the basic for creating the report. The advanced settings can be found under the “Settings” button (explained in the next paragraph).



Target file
the file to which the report will be saved. The report is saved as a PDF file.

Report Type
there are two report types, the list report and the card report. See the previous paragraph for examples of both types.

Fields
All fields belonging to the module are listed. Fields can be excluded from the report and the alignment can be set (left / center / right).

17.2. Settings

Each module has its own dedicated report settings, for both report types. The settings are divided in 4 main groups:

Text
All settings for the field values

> ***Create index***
> Only available for Card Views. Creates an index within the PDF for easy reference. Adds a numbered title to each record.
>
> ***Position of values***
> Show text below or beside the labels
>
> ***Borders***
> Options: border bottom, border left, border right, border top. Check the checkbox to enable the border for the chosen side. The borders are shown around the values of the fields.
>
> ***Text Color***
> Font / Text color
>
> ***Text Font***
> Font for the field values / text
>
> ***Text Border Color***
> Color of the (activated) border(s)
>
> ***Text Background Color***
> Background color for all field values

Labels
All settings for the field labels

> ***Borders***
> Options: border bottom, border left, border right, border top. Check the checkbox to enable the border for the chosen side. The borders are shown around the labels.
>
> ***Text Color***
> Font / Label color
>
> ***Text Label***
> Font for the labels
>
> ***Text Border Color***
> Color of the (activated) border(s)
>
> ***Text Background Color***
> Background color for all labels

Header
Page header settings. The header is shown on each separate page.

Show header
Disable / Enable the page headers

Page header text
Static text, displayed in the header for each page

Header Text Color
Header text color.

Header Font
Font for the header text

Header Background Color
Background color for the header

Footer
Page footer settings. The footer is shown on each separate page.

Show page numbers in the footer
Disable / Enable the page numbering. The page numbers are displayed in the footer of each page

Page footer text
Static text, displayed in the header for each page (as <description> <page number>)

Footer Text Color
Footer text color.

Footer Font
Font for the footer text

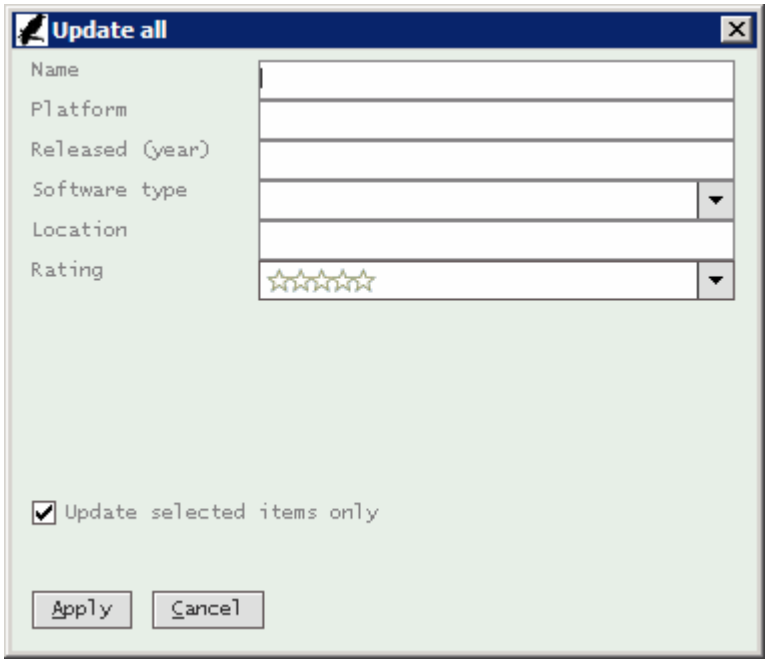
Footer Background Color
Background color for the footer

17.3. Printing a report

Data Crow has no functionality to print PDF files. In order to print a PDF file find a free Pdf viewers suitable for the platform you are running on.

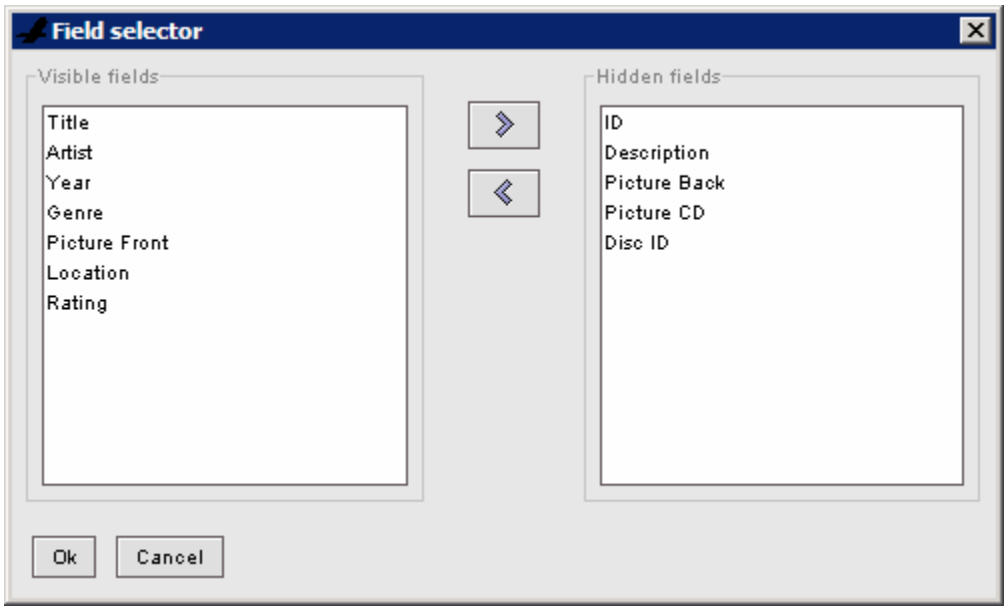
18. Update All

The Update All function is accessed via the right-click menu. This functionality allows you to quickly set selected fields within a table to a common value. The update is performed on screen only—you still have to save the update to the database.



19. Field Selector

Here fields can be selected to be shown in the tables or made hidden. The field selector can be started from the right-click menu and from the settings menu.



20. The database (HSQL)

For more information about the HSQL database, please visit the HSQL webpage: http://hsqldb.sourceforge.net/.

By default, the database is called “dc”. Corresponding files called “dc.script”, “dc.data”, and “dc.properties” are created within the /data directory.

21. Credits

I am grateful that other projects are out there providing sources and packages to include in Data Crow, and I would like to thank:

Amazon.com for allowing me to retrieve data from their web servers
http://www.amazon.com

IMDb.com for allowing me to extract data from their database
http://www.imdb.com

Freedb.org for allowing me to extract data from their database
http://www.freedb.org

Med's Movie Manager allows parsing of various movie file formats
http://sourceforge.net/projects/xmm

To give Data Crow a somewhat funnier look we used the excellent icons from Gort
http://www.forrestwalter.com/icons/index.html

JD3Lib for helping with reading Mp3 ID3/ID3v2 tags
http://sourceforge.net/projects/jd3lib

Entagged. I had been switching back and forth between different music tag readers, but now Entagged is available and I like it!
http://entagged.sourceforge.net/

HSQL: This product includes Hypersonic SQL.
Originally developed by Thomas Mueller and the Hypersonic SQL Group.
I want to thank Thomas Mueller for providing this application with an easy-to-use, powerful but small, and platform-independent database.
http://hsqldb.sourceforge.net/

iText for providing PDF and HTML reporting
http://www.lowagie.com/iText/

Tonic Look and Feel
http://www.digitprop.com/p.php?page=java&lang=eng

izPack
For providing a smooth way to install Data Crow on multiple platforms
http://www.izforge.com/izpack/