

# **Data Crow 1.00**

## User Manual



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## 1 What is Data Crow

Data Crows helps you to maintain a software, music or movie collection. By using the internet (Amazon, Imdb) and making use of information stored within files, the registration is automated as much as possible.

I have been around some time and my CD-Rom collection has grown and grown over years. Always having a backlog of CD's to register I did not like starting up Access and putting all my data into the database manually. I started programming as a profession and this gave me the tools to start my own little application. I know, this sort of application has been done many, many... many... times before. Though, I have created it with much care and I believe that in the area of automated registering of software (games and programs) **Data Crow rocks !**

## **2 Starting the application**

After the installation the product can be started. The log will always be opened first as this gives information on errors and events. After one or two seconds the connection dialog will appear;

### **2.1 Database driver**

Here the connection details can be filled in. By default Data Crow will use a HSQL database. The value "Database Driver" only needs to be changed when for any reason you would like to use another database then the, within Data Crow, HSQL database.

### **2.2 Database name**

The name of the database is "dc" by default. This name can be changed to your demand. When you want to use another database then the HSQL database, you can type the connection string into this field as needed for this database.

When Data Crow is run as a server, you can specify the address of this server here. For example, when running the database server on the same machine you would fill in //localhost.

The server is started by using the batch file 'run-HSQL-Server.bat'.

### **3 Main window**

The main window exists out of a menu bar, a couple of tabs and a status bar. The main window has the same behavior as normal windows on your platform. By clicking on one of the tabs the content belonging to this tab will be presented to you.

## 4 Menu bar

Here the default menu options are described.

### **View Events**

Opens the events screen. This screen shows you what is going on in the application engine. Queries to the database are shown, errors are logged and any other event can be retrieved here.

### **Music Organizer**

This tool allows you to physically sort the MP3's. It reads all the mp3's from a given location, reads the ID tag information and moves mp3's with the same value to one directory.

#### *Ordering type*

Can either be "genre", "album" or "artist"

#### *Input directory*

The directory where the mp3's persist

#### *Output directory*

If no directory is chosen, the input directory will be used as the output directory

### **Settings**

Allows you to change the general behavior of the application. Visual option, such as changing the background color, or data structure options, such as the required fields, can be found here.

### **Media Import**

Import data directly from a hard disk or cd-rom. This will be described in more details later on in this document.

### **Module**

Changes the current selected module. The application will remember the application you had selected during a previous run and present this module to you when you start Data Crow again.

### **Software categories**

A piece of software can be categorized by using the list box "Software type". By default there are no categories (a category could be "tool", "3d shooter", etc). To add or change categories select the "categories" button from the menu bar. Here you can enter new data or update existing categories.

## 5

## Settings

The settings screen is opened from the menu bar. There are 3 categories of settings; General Settings, HTTP Settings and Background color.

The settings for the individual categories can be saved by pressing the “save current” button. All settings of all of the categories can be saved by pressing the “save all” button. The button “close” cancels all changes to the settings and closes the settings window.

The settings are stored in a file; “DataCrow.properties”. This file exists within the installation directory of Data Crow. If this file is damaged or deleted the default values will be used and the file will be recreated by Data Crow.

### 5.1 General Settings

Here the general behavior of Data Crow can be changed. The following settings are available;

#### **Load Demo Data**

When no database is present, a new one is by default created by Data Crow. This option allows for Data Crow to insert some demo data into this new database. The option is only used when starting up the application. By default the setting is disabled.

#### **Maximum of search records**

The maximum amount of retrieved records is defined by this setting. By default this is 1000 records.

#### **Check for value uniqueness upon saving**

When active Data Crow will check if the record is unique before it is saved. The uniqueness is checked by the required field values. If the record is not unique it cannot be saved. By default this option is enabled.

#### **Check for required fields upon saving**

Checks if all the required fields have been filled. If they haven't been filled, the record is not saved to the database. Data Crow will show a message which tells you which fields should be filled before the record can be saved. By default this option is enabled.

#### **Ask to close server on exit**

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

## **5.2 Required field settings**

The required fields can be specified by setting the value “required y/n” to “yes” in the required fields table.

For each module the required fields can be set. The fields will be checked if they are filled if the option “check for required fields upon saving” is enabled (see chapter 5.1). The required fields can also be used to check if new data is unique before saving it to the database by the option “check for value uniqueness upon saving” (see chapter 5.1).

## **5.3 HTTP Settings**

Here the general HTTP settings can be specified.

### **HTTP user agent**

With this string Data Crow identifies itself to the servers it tries to contact. It should not be needed to change this value, but if you feel the need to do this you can. It was originally here for test purposes. The default value is; Mozilla/4.04 (Windows; I; Win95).

### **Proxy Server port**

If you are behind a proxy server you’ll need to fill in the port of this server. By default the port is set to 0 (not present) . Mostly the server port will be something like 8088.

### **Proxy Server name**

Also the name of the server needs be filled in if you are behind a proxy server.

## **5.4 Background color**

The background color is set by using the slider on the right side of the color panel or by clicking on the color in the color pallet. The color of Data Crow is immediately changed.



## 6 Existing values / Search Database

Every module has the tab “Search Database”. Here existing data can be retrieved and altered.

### 6.1 Searching for records

When searching for records, search conditions and search options are used to filter and retrieve the results.

#### 6.1.1 Search conditions

In the “Search conditions” area the values can be entered for which must be searched. It is possible to enter more than one value on which must be searched. This can be done by separating the values with the ‘%’ sign. For example the search condition “easy%creator” will retrieve all records which contain easy AND creator. Note that there are no spaces between the ‘%’ sign and the values.

#### 6.1.2 Search options

##### **Comply to all conditions**

With this option can be specified if the resulting records must comply with all the search conditions or each search condition separately.

Example; the following search conditions have been specified

name = “test”, location = “CD1”

If the search is executed with the option “And” the result will contain all the records which contain the name “test” AND the location “CD1”. If the option is set to “Or” the result will contain all the records which contain the name “test” OR the location “CD1”.

##### **Apply to the full values in the condition only**

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

##### **Order by**

Orders the results by the selected field

#### 6.1.3 Search results

In the search result table the results of the search are displayed in the table. One row represents one record.

## **6.2      Viewing & changing existing records**

Once a search has been executed and the results are displayed in the search results table. To clear the results from the table on screen press the “clear” button.

Records can be opened by a double click on one row, pressing F12 or using the right-click menu. Doing this, the record form is displayed.

### **6.2.1      *The record form***

The record form represents one record in the database, in this case a software record. Data can be altered here and then saved to the database. Also records can be deleted or updated with data from an external, online, database. This last option will be explained later on in this document. The option “close” discards all changes made to the record.

### **6.2.2      *Updating data in the table (directly)***

Instead of opening a record, you can also change, delete or update data in the table. You can walk thru the rows using the direction keys. By pressing F2 the selected cell will change to edit mode and you can change the data. Changes are saved by using the right-click menu or by pressing the button “save changes” which is positioned in the right left corner below the table.

### **6.2.3      *Using the right-click menu***

All options on the table are available in the right-click menu. Some actions are only for one record only, such as “open” and some can be used on multiple selected rows.

**Field Selector**

Opens a dialog which allows you to select the fields to be displayed. More about this later

**Update all**

Quickly sets all the fields in the table to the by the user specified value.

**Open**

Opens the selected row (shows the record form)

**Save**

Saves the selected row(s) to the database

**Delete**

Deletes the selected row(s) from the database

**Update <online database>**

Updates the selected row(s) with data from an online database such as Amazon or Imdb

**Export table to PDF**

Exports the data to a PDF document.

## **6.3            Creating a report**

Exporting data can become very important when you want to share what you own with a colleague or a friend. Right click on a search result and select ‘export to Pdf’. You can now select the file to which the data should be written.

There is status bar to show you how long it will take till the report has been completed. Though there is a very easy way to track the progress. If you take a look at the event view, you will see that it states which record is currently being added to the report.

## 7 New values

New values can be added by selecting the tab “new values”. By default the table will always be empty (no rows are present). To enter new data click “add row”. An empty row is added to the table. You can either enter the data directly into this table or use the record form. This works the same as for the existing values.

### 7.1 The right-click menu

For the “new values” table the right-click menu offers less option then the “existing values” table.

**Field Selector**

Opens a dialog which allows you to select the fields to be displayed. More about this later

**Update all**

Quickly sets all the fields in the table to the by the user specified value.

**Open**

Opens the record in the record form

**Save**

Inserts the new values into the database

**Del row**

Removes the row from the table

**Add row**

Adds an empty row to the table

**Update <online database>**

Updates the selected row(s) with data from an online database such as Amazon or Imdb

## 8 Updating data using online databases

As explained earlier in this document, the option to update data (new or existing) using an online database is available either by using the record form or by using the right-click menu.

### 8.2 Options

There are two important options. The value you selected will be remembered for a next time.

#### **Overwrite existing values**

Overwrites the record with the values you chose to be transferred. If you do not select this option, only empty fields are updated

#### **Optimize For Broadband..**

When selected, better images are retrieved for software records. When the waiting time is bearable, select this option.

### 8.2 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 has been filled already or the title of the movie has been entered. Otherwise the search form will just be opened without starting a search action.

If the result you are looking for is not shown, you can start the search again by changing the search criteria and starting the search again. Results will be added to the result table.

### 8.3 Transfer data to record

If the result you were looking for is shown, select the record and press transfer. The option "Overwrite existing values" does just what it says it does. Once changed, the option will be remembered for future updates (though can be changed again).

### 8.4 Canceling the search

If more the one row was selected to update, you will have to press "Stop all" to stop the entire update. To stop a single search, press "Stop". Pressing "Stop" while updating multiple records only cancels the update for the current record, the batch will continue as normal.

## 9 Importing data

With the media import you can quickly retrieve information from CD-Rom or hard drive. The feature can be found in the menu bar and has the name 'media import'.

### **Import from location**

The location from which information will be read

### **Location name**

It is up to you. You can for example enter the volume name into this field

### **Confirm each directory**

Using this option, the create import process will for each directory it encounters, ask you if the data from this directory should be read or not. If you choose to 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.

## 10 Query Tool

The query tool offers a quick and direct way to manipulate data from the database. It surpasses every check on data so it should be handled with care.

If you know nothing about SQL you'd be better off not using the Query Tool as you might make unwanted changes.

### **Query input**

Input the a SQL statement and press "Run" to execute the statement. Errors will be shown if the query was incorrect. These messages are not generated by Data Crow but by the database engine.

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

### **Query result**

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

## **11 Block note**

The block note can be used to maintain a TODO list or just to write some remarks in there. It's very straight forward. The block note is for every module the same.

## **12 Field Selector**

The field Selector allows you to choose which fields are displayed and which fields are not. These fields will still be used for data validations (such as required fields) and also will they be updated using media import or internet updates.

Hidden fields play an important part as these fields will not be shown in tables, in the search condition, in PDF reports and ....

## **13 The database (HSQL)**

For more information about the HSQL database you could best go the HSQL webpage: <http://hsqldb.sourceforge.net/>

The database is stored in files. By default the database is called "dc". For the database "dc" the file "dc.script", "dc.data" and "dc.properties" are created within the /data directory.



## 14 Data Files

The data files (such as the database itself) can be found in the /data directory

File	Explanation
DataCrow.log	The log file
DataCrow.properties	The settings files. If removed or damaged it will be re-created
DataCrowComment.txt	Contains the block note content. Can be safely removed
DataCrowQueries.txt	Contains the query statements form the query tool. It will be recreated when removed

## 15 Credits

This piece of software would not have succeeded (or even existed) with help from other development teams and information providers:

I am glad other projects are out there, providing me sources and packages to include in Data Crow. If it wasn't the case, I was still busy trying to create a database driver...

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>

HTTPClient 0.3-3 for providing a HTTP client with proxy capabilities

<http://www.innovation.ch/java/HTTPClient/>

JD3Lib to help me with Mp3 ID3/ID3v2 tags reading

<http://sourceforge.net/projects/jd3lib>

Entagged. I have been switching back and forth between several music tag readers. Now there is entagged and I like it so far..

<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 me with the PDF and the HTML reporting

<http://www.lowagie.com/iText/>

Tonic Look and Feel

<http://www.digitprop.com/p.php?page=java&lang=eng>