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Overview

HM-Card is an authoring system for hypermedia applications of different purpose-orientations. The hypermedia databases created with HM-Card can be integrated into other systems or browsed separately (as a stand-alone hypermedia application). The editing and linking facilities enable the creation of typical hypermedia documents, links, tours of various complexity.

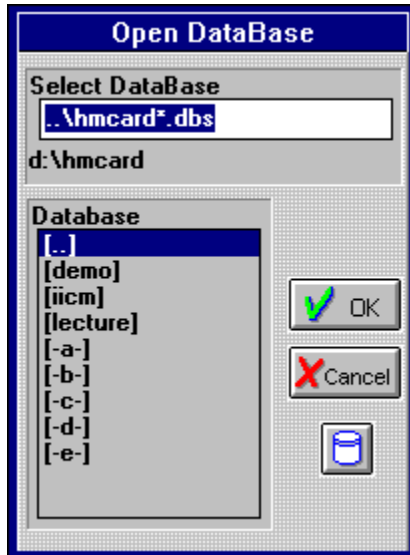
Although the terminology is conventional, the user (or author) requires at least a basic understanding of HM-Data Model (the underlying concept of HM-Card) which allows the user to design the hypermedia database from scratch and provide different views to it (depending on context, semantics, hierarchy and so on).

The complete authoring software consists of three components:

- a. HMC_EDIT.EXE : Editor (for creating information pages)
- b. HMC_LINK.EXE : Linker (for building a desired data structure of hypermedia database)
- c. HMC_EXEC.EXE : Executor: a stand-alone interactive browser of hypermedia databases.

Getting started

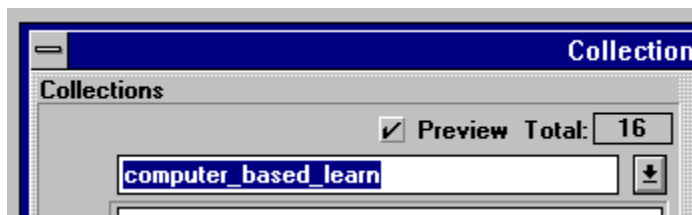
When the executor is invoked without additional parameter **-a** (see [Options of the Executor](#)), the "open database" dialog box shown below appears.



If the database already exists in the current directory then the file name "hmcad.dbs" automatically appears in the edit box "Select Database". Another sub-directory can be selected as the working directory in the conventional windows way.

In order to open database click on OK.

After opening a database and when the executor is invoked without additional parameter **-a<S-collection>** (see [Options of the Executor](#)), the dialog box "Select current S-collection" shown below appears.



In order to start a navigation a particular S-collection should be selected as an initial current container.


The initial current container can be selected by means of this dialog box and the selection is confirmed by clicking on OK button.


Link-Based Browsing of Hypermedia databases


Hypermedia database created by means of HM-Card consists of S-Collections which combine information pages (i.e. chunks of multimedia information into a computer-navigable logical structure). Any S-collection can be visualized. Normally during visualization of S-collection the label is shown. In case the current S-collection is devoid of a label, the head of the S-collection is visualized. At any particular moment in time, the user can navigate only through a single, specific S-collection called the *current container*. Only members of the current container can be accessed during navigation. Links within the current container serve as a navigational paradigm. A concrete member of the current container is the *current member* for each particular navigational step. Only members related (linked) to the current member can be accessed in the next step of navigation.


Navigation within a particular current container is carried out in accordance to its type: Folder, Menu, Envelope, Freelinks.

Additionally to the basic navigational paradigm which is provided by operations:

- "Access" ,

, scrollable list, hot areas, pushbuttons, "hot" words.

- "Zoom In" 

- "Zoom Out" 

There exist a number of optional navigational tools:



Folder

In the case of a "folder" only the links to next and previous members are available for the next step of navigation.



Next member

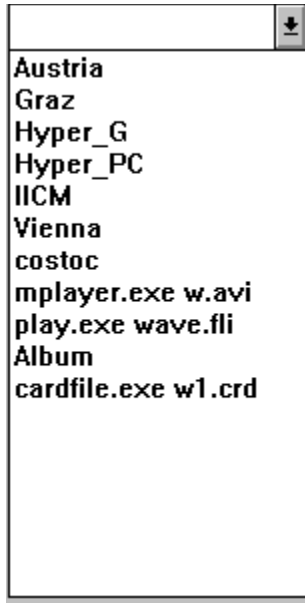
Previous member

Menu

In the case of a "menu", when current S-collection is a head, the links to all other members are available. However, the visualization of the links depends on the sub-type. Recollect that there are four forms of link visualization: in the form of scrollable list, hot areas, pushbuttons or "hot" words. Thus, a certain link can be activated by means of operations with a corresponding anchor. For instance, a link can be activated by pressing a push-button, clicking on a hot-word or on a "hot" area.

Envelope

In the case of an "envelope" the links to all members are available in the form of a scrollable list.




A particular link is activated by means of selection a desired name.

Freelinks


In the case of "freelinks" the links are visualized in the form which depends on the sub-type: in the form of a scrollable list, hot areas, pushbuttons or "hot" words. Thus, a certain link can be activated by means of operations with a corresponding anchor similar to S-collections of type Menu.


Access

The operation "access" makes branch from *current member* of *current container* to another member linked with the *current*. Choice of the link be activated depends of collection type. The main buttons for

"access" operation is  and



The button  activates link "Next" for Folder container and makes branch to member which placed **after** *current member* within *current container* for other types of the current container.

The button  activates link "Prior" for Folder container, makes branch from current member to head for Menu container and makes branch to member which was accessed **before** *current member* within *current container* for other types of the current container.

In the case of Menu and Freelinks some links can be visualized in the form which depends on the sub-type:

- a scrollable list,
- hot areas,
- pushbuttons,
- "hot" words.

Thus, a certain link can be activated by means of operations with a corresponding anchor. For instance, a link can be activated by pressing a push-button, clicking on a hot-word or on a "hot" area.

Zoom In



The operation "zoom-in" changes the status of the current member to current container. After a Zoom_In operation, the head of the new current container automatically becomes the current member and is visualized appropriately (i.e. corresponding label or head is visualized).

Zoom Out



The `Zoom_Out` operation is the complement of `Zoom_In`. `Zoom_Out` restores the current container and current member to the state they had before the *most recent* `Zoom_In`.



This button allows to repeat visualization of the current S-Collection.



If a particular page includes "pause" objects, visualization of such page is interrupted and the system shows the buttons:



This button allows to continue visualization of the page starting from a current "Pause" object.



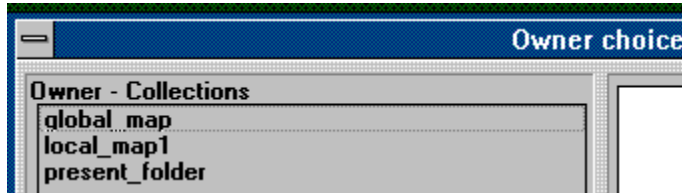
This button allows to repeat visualization of the current S-Collection.



This button allows to "skip" all objects after a current "Pause" object.



The button "Zoom Up" provides possibility to "switch" current member from one current container to any other container where the current S-collection is defined as member as well. Thus, after pressing this button the following list of all such containers appears:





This button activates bookmarks attached to the current container, in order to access an S-collection marked with a particular bookmark a desired name should be selected from the list of all bookmarks.



This button gives necessary information about current position within the database:

The screenshot shows a window titled "Collection" with the following sections:

- Current collection:** JUCS, Head: @page18, Label: @JUCS_label. Below are three icons: a tree, a globe, and an upward arrow.
- History:** A list containing "JUCS" and "global_map".
- Current member:** hyper_g
- Members:** A list containing "@page18", "@page36", and "hyper_g". Below is a "Total: 3" label.
- Owners:** A list containing "global_map", "hyper_g", and "present_folder". Below is a "Total: 3" label.

At the bottom right of the window are two icons: a magnifying glass and a refresh symbol.

History: stack of all S-collections which have been "Zoomed In" during the navigation. Note that the operation "Zoom Out" pops up an S-collection from this stack. Thus, we can say that the history is a list of all currently "Opened" S-collections.

Current S-collection: name of a current container and parameters of the current container:

This block shows a detailed view of the "Current collection" section with the following fields:

- Head:** @page18
- Label:** @JUCS_label

Below the fields are three icons: a tree, a globe, and an upward arrow.

This block shows a detailed view of the "Current member" section with the following field:

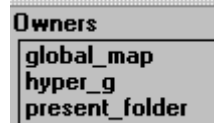
- Current member:** hyper_g

-Name of a **current member**,

all members of the current container are listed below:

This block shows a detailed view of the "Members" section with the following list:

- @page18
- @page36
- hyper_g



The sub-part **owners**: gives list of all S-collections where the current member has been defined as a member as well. In other words, this is a list of S-collections where the navigation can be "switched to" by means of the "Zoom Up"




operation.




The button allows to "switch" navigation into another member of current container or into one of previously "Opened" containers. A desired name is selected from list of **current members** or from **history** list and confirmed by pressing the button




The button  just closes window shown above.


Additional tools


Additional tools are initiated by means of the button 

Additional tools include the following buttons:



and the button  appears if current resolution of the user's screen is not equal to resolution which has been used for preparation of the visualized multi-media information.

The button  changes the procedure of page visualization. Normally pages are visualized in the same resolution as they were created. Thus, if current resolution is higher then resolution used for page creation, only a part of the screen is actually used. Otherwise only part of original information is visualized. The button

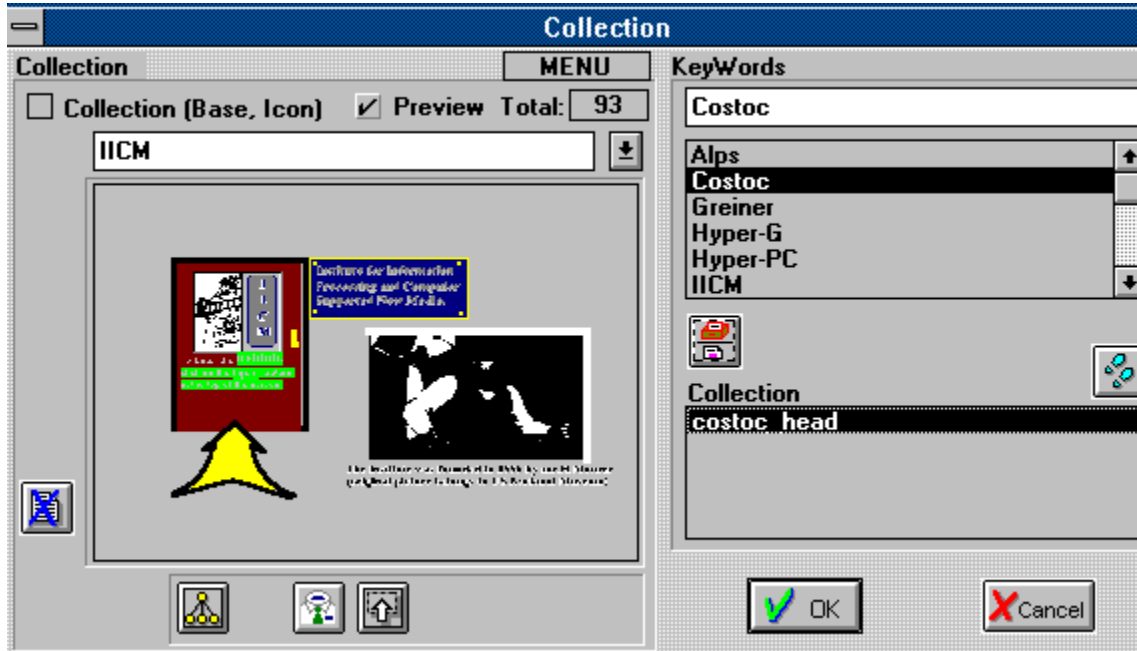
 adjusts image to the current resolution. In this release of the system correct functionality of this function is not guaranteed.



This button allows to select a new database for further browsing;




This button allows to select a new current container directly by its name or using keyword search. S-collections can be provided with keywords via this button as well. When the button is pressed the following window appears:





This button initiates procedure of user's registration , the user has to know his/her system name and password in order to come through this procedure. System names and passwords are installed by

administrator of the system via the button . In order to install a new system user's name and password the administrator has to know system administrator's name and main password. The system administrator name and main password are properties of each particular installation diskette.




This button provides window where a particular annotation attached to current S-collection can be typed in, Only previously registered users are allowed to annotate S-collections.



System names and passwords are installed by administrator of the system via this button. In order to install a new system user's name and password the administrator has to know system administrator's name and main password. The system administrator name and main password are properties of each particular installation diskette.



For presentation purposes the cursor can be transformed to "live pen" and used in order to make dynamic drawings on the screen. In order to apply this facility, right button of the mouse device should be pressed and a desired line can be drawn keeping the button pressed. The button  is used in order to adjust style, width and color of such dynamically drawn lines.



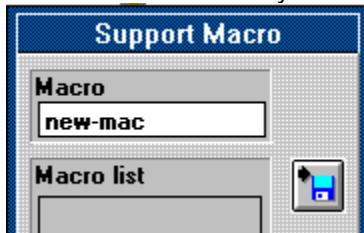
The executor supports concept of so-called "Macros" or predefined tours. A particular macro is a sequence of user's navigational actions which can be repeated automatically. Each macro has a unique name, and is stored into a special library. A particular macro is recorded (written) by means of the button



. After pressing this button, an image on the screen is refreshed (i.e. visualized once more) and the system switches to "recording macro" regime. Now all users actions are recorder until the same button



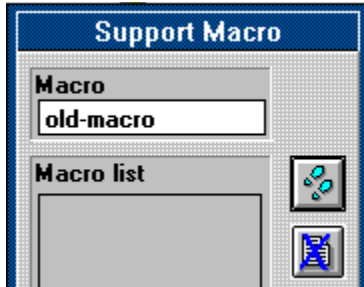
is pressed again. The following window allows to assign a particular name to newly created macro and store it in the library.






Previously recorded macro can be executed (read) by means of this button.

In order to execute or delete previously defined macro, a desired name should be selected from the list of all macros.



Then the selection is confirmed by clicking on the button  (in order to execute the macro) or by clicking on the button



(in order to delete it).



In order to directly modify a page visualized on the screen, this button can be used. The button "switches" the executor to the "editor" regime.

Options of the executor

When the Executor is invoked, options in command line can be used. General format of command line is as follows:

win hmc_exec.exe [options]

Item enclosed in brackets are optional:

The following options are available:

- r - registration of new users;
- a - database in the current directory is automatically opened;
- a<S-collection> - database in the current directory is automatically opened and navigation begins using the S-collection as a current container;