

## 4.8. Import

This object is used to import images, text and sound files of various formats. It allows the inclusion of graphic and sound objects created by other editing, recording or scanning utilities. It helps the creation of good looking and easy-to-understand material with different graphic and sound effects.

Additionally, the object can be used in order to add to the functionality of the HM-Card with the abilities of other software systems (for example, movie and sound players, formula editors, 3D-animators, spread-sheets, etc.).

The imported item is not actually inserted into the collection, just linked to the page. The database will contain only the name of the file attached to the page.

Note that information being imported into the page actually resides outside HM-Card and may be edited separately. They may be edited independently and the information is presented as modified next time the page is accessed. Thus, the appearance of the collection "The President of the USA" on the screen is current if an external file containing an image of the president is updated and linked to the collection via the import facility.

### ***To import a file (basic principles):***

All external objects imported into the HM-Card are independent files. Information necessary to re-use such independent files is stored within an HM-Card database.

First, a particular type of file should be selected from the types available:

These files types can be imported by the current version of the system (for detailed explanation of each option, see below)

When a particular type of importing file has been chosen, the system offers the possibility of selecting a particular file for importing, which can reside in the current or other directories.

The desired file is selected using standard Windows conventions.

If the file is imported from the current directory, then no additional information is needed.

If the file is imported from another directory, the system requests permission to copy the file into the current directory

This can be confirmed with the "OK" button or denied with the "Cancel" button.

If confirmed the system copies the file and stores the name of imported file only; If canceled, the system stores a *path* (or link) to the imported file.

Note that if a file is imported from another directory there may be problems, if the database is copied to another PC with a different structure of directories.

Note also that the files which were imported with the "Copy" option can be deleted from the working directory afterwards, if the directories actually containing these files are put in the system path.

## *Importing pictures*

Any picture in one of the four supported file types can be imported. When inserted it can be repositioned on the screen and resized.

***To import a picture:***

1. Choose the Import button from the Object Type speedbar. The New Import dialog box appears on the screen:
2. Choose the Picture option by clicking the picture radio button in the Objects box. The Open File dialog box appears on the screen:

3. In the Types list box select the format of the picture to be imported. The following formats are currently supported:
  - Windows 3.0 Bitmap
  - ZSoft Image Format
  - LPA Picture Format
  - GIF Picture Format

The system chooses the default extension according to the selected format.

**Current version limitation:** Not all of the GIF formats are supported in the current version of HM-Card. (256 colours formats are not supported).

Pictures imported to the page must not change their physical size in the original file. If their size is altered, the import object must be redefined.

4. Choose the file to be imported from the Files list box.
5. Click the OK button. A new window displaying the of from the selected file appears on the screen. It has vertical and horizontal scroll bars to move through the whole picture.
6. Select a fragment of the picture (if required) to be inserted into the page by clicking and dragging over the required area. If no area is selected, the whole image is imported.

7. Choose the insert button in the New Import dialog box to insert the image into the page, or use the Cancel button to discard the image. The picture is inserted into the upper-left corner of the page and has a re-sizable frame.

Move the picture to the desired position on the screen by clicking and dragging with the mouse or resize it by dragging the frame.

Finally, click the Save button to add it to the page or cancel it with the Cancel button.

## ***Importing text files***

The HM-Card Editor allows any text file to be imported into a page. This object is usually introduced when the text information to be present on the page is too large to fit on the page. The imported text appears as a window with the scroll bars. During page execution it can be treated as a normal window, with the standard Windows abilities, such as moving, resizing, etc. The text window has a control-menu box in the upper-left corner. By using the control-menu commands the text window can be closed and collection execution resumed. The text window can be also closed by double-clicking the control-menu box or by pressing Alt+F4.

### ***To import a text file:***

1. Click the Import button in the Object Type speedbar. The New Import dialog box appears on the screen.
2. Select the Text option by clicking the corresponding button in the Object box. The Open File dialog box appears on the screen:

By default the extension of the text file is "TXT", but this is not obligatory. Any extension filter may be entered. Files and directories available for opening are listed in the Files List box of the Open File dialog box according to the default extension.

3. Select the file name from the Files List box and click OK to open it. A new window containing the selected text appears on the screen.

The window is provided with movable boundaries for resizing.

To move the window to a desired position on the screen, drag its upper border with the cursor or resize it by dragging the boundaries.

Finally, either add the text to the page by clicking the Save button or discard it by clicking the Cancel button.

**Note** The size of the file to be imported must not exceed 32767 bytes. A warning message appears if this is



attempted.

## ***Importing Menu***

HM-Card supports visualisation of computer-navigable links in the form of "hot" words. Thus, a number of words within a passage of text can be designated as "hot". Clicking one of the hot words during browsing activates a computer-navigable link to another S-collection. Actually, computer navigable links are installed by means of the linker part of the HM-Card system. A text which will contain hot words must be inserted into an information page using the editor. This kind of text, which is inserted to be used for further definition of hot words, is called "menu".

Menu text is imported in the same way as an ordinary text, described previously.

## *Importing sound*

HM-Card Editor allows sounds to be imported into pages. Besides using the simple Tone object, sound files may be inserted from the standard Windows sound format "WAV".

Sounds inserted into collections often make them more interesting and allow different effects to be used which may be helpful in explaining or presenting something in a more dynamic way.

This facility requires that the "speaker.driv" driver is installed on the computer. Without this, no sounds will be heard.

As with texts and graphic images, the imported file attached to the page may be independently edited with other programs.

### ***To import sound:***

1. In the New Import dialog box click the Sound radio button. The Open File dialog box will appear on the screen.
2. Choose the file containing the sound to be imported. The files are displayed in the list box according to the extension used as a default. The standard extension is "WAV", but this may be changed by typing another extension into the box.

After choosing a file or typing its name into the box click the OK button.

3. In the New Import dialog box click the Save button to insert the sound file into the page or Cancel button to discard it. The whole sound file will be attached to the page.

## ***Importing executable files***

The functionality of the HM-Card can be combined with the features of other systems or programs via executable files. Actually, HM-Card simply launches such an imported executable file during the execution of the "Import" object.

Executable files can be imported in two different ways:

**Synchronous** and **Asynchronous**.

Asynchronous execution allows the application program to be launched and execution of HM-Card can continue independently.

Synchronous execution allows the executable file to be an integral part of the navigational strategy. The system suspends operation of HM-Card after launching a synchronous executable module, and resumes operation when the module is terminated.

## **To import an executable file:**

1. Choose the Import button from the Object Type speedbar. The New Import dialog box appears on the screen:
2. Choose the Executable option by clicking the corresponding button in the Objects box . The Open File dialog box appears on the screen:
3. Select a desired executable file in the conventional windows way.
4. Type in parameters necessary for the running the executable. It will be run as though the command was issued from the command line.

## ***Importing OLE objects***

OLE objects can also be imported to enhance the functionality of HM-Card. The Object Linking and Embedding (OLE) concept can be seen as a special interface between two software systems, called the OLE client and OLE server. OLE servers provide some functionality which can be embedded into an OLE client. In this context, HM-Card is an OLE client, which is compatible with different OLE servers.

An OLE object is interpreted as follows:

- the OLE object is visualized on the screen at run-time in the form of an icon. The size and image of this icon are defined by the OLE server;

For instance, this is a possible icon provided by an OLE server.

- HM-Card displays a corresponding icon on the user's screen. Now the corresponding OLE server can be actually activated by double clicking the icon with left mouse button, or activity can be returned to the HM-Card by double clicking the same icon with the right mouse button.

OLE objects are not special executable files, but a procedural definition of the run-time interface to another program. HM-Card creates special files having the extension "OLE" which contains all necessary information about the interface to be interpreted by the HM-Card executor at run-time.

Thus, importing OLE objects is accomplished via automatic



creation of such files.

***To import an OLE object:***

1. Choose the Import button from the Object Type speedbar. The New Import dialog box appears on the screen:
2. Choose the OLE option by clicking the corresponding button in the Objects box .
3. Select the status of the run-time execution of the OLE object and confirm the selection with the OK button.



The above listed options mean the following:

**Non-stop playing frame (postponed)** : An OLE object is interpreted as follows; HM-Card displays the OLE icon on the user's screen. Either the corresponding OLE server can be actually activated by double clicking the icon with left mouse button, or activity can be returned to HM-Card by double clicking the same icon with the right mouse button. If a number of OLE objects exist within one information page, the interpretation of these objects can be postponed until all other objects with this option have been interpreted. In this case, icons corresponding to postponed OLE objects are displayed on the user's screen at the end of page interpretation. Thus, the user can activate one of the OLE servers, or continue normal navigation using the HM-Card navigational tools.

**Auto-play object:** normally an OLE object is visualized on the screen in the form of an icon. The size and image of this icon are defined by the OLE server. The OLE server is actually activated by double clicking the icon with left mouse button. Double clicking the same icon with the right mouse button deletes the icon and returns activity to HM-Card. This option automatically activates the OLE object during page execution, without the need to double click the icon.

**Prohibit playing:** some OLE servers provides all the necessary information directly within a corresponding icon. For instance, the **MS WordArt** provides users with possibility of defining complicated textual fragments, and **MS Words** allows users to create an edit mathematical formulas, etc. The resulting information is already visible on the user's screen in the form of an icon, so the corresponding OLE server should be activated only for run-time editing of the information. For example, this is an icon which could be defined by means of the formula editor of the **MS Words** OLE server.

If such run-time editing is not to be permitted, the activation of the server can be prohibited with this option. Only the corresponding icon will appear on the user's screen and HM-Card will continue with page execution.

**Without frame:** normally information provided by a selected OLE server is shown within a frame which is inherent in this particular software system.  
For instance:

The frame can be hidden during execution of the OLE object if

the check button has been selected:

5. Select a desired OLE servers from the list of all OLE servers registered in the computer and confirm the selection with the OK button.

Further behavior of the system is dependent on the selected OLE server. The editing process switches from the HM-Card editor to the selected OLE server.

At this point refer to a description of editing process required for the selected OLE server. For example, if the **MS movie player** for windows is selected, the desired file (having the extension AVI or WAV) should be imported

In the case of other OLE servers, the editing process is defined by these servers. For example, a formula editor provides the following menu to create/edit a desired formula.

After defining OLE object to be imported, using the internal tools of the selected OLE server, the following actions need to be performed:

- store the definition of the OLE object into HM-Card (menu item "Update" within pull-down menu "File" or "Data" of the OLE server);
- quit from the OLE server and return to the HM-Card (menu item "Exit or Return" within pull-down menu "File" or "Data" of the OLE server);
- select the position of the icon on the user's screen (click the icon which appears in the upper left corner of the screen, with the right mouse button, and drag it into the desired position).