

Serial Number: _____

of Users: _____

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HalFILE DDE Viewer

Addendum to halFILE for Windows™ Document Storage & Retrieval

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Enabling Other Applications

halFILE for Windows™ is able to work with some existing databases, integrating image retrieval functions dynamically from the database screens you are familiar with. The requirements for Image Enabling your database are as follows:

1. halFILE ODBC compliant databases are the only databases supported at this time.
2. You must have the ability to modify your program or apply a macro to your program that will perform the DDE functions described below.
3. You must purchase the halFILE DDE Viewer from hal Systems Corporation. Call your sales representative for more information.
4. The application that you are enabling must contain some field or value that can be passed to the DDE viewer so it can find the related image using a halFILE database.

With the DDE Viewer, you scan and index images using halFILE. The index information you supply will be used to link to your application. For instance, if your application was an invoicing system that used an invoice number to uniquely identify an invoice, you could scan the invoices into halFILE and enter the invoice number into the halFILE image database. Then, from your application, you could pass the invoice number to find, display and print the image for that invoice.

The following describes the technical requirements for the DDE Viewer.

halFILE DDE Viewer

1. Start VIEWER.EXE or shell to it from your program.
2. Open a channel to a DDE Conversation with the Link Application and Topic Set to VIEWER. In Visual Basic For Applications (Such as used by Excel, Word, etc.) this can be accomplished by the following:

```
ChanNum = DDEInitiate("VIEWER","VIEWER")
```

3. Next set your link item. The viewer supports two items: "Action" and "Result". In many environments such as VBA you must pass the function you want to call along with the link item as in the following example.

```
item = "Action"  
function = "OPEN_DB(xxx;yy)"  
DDEPoke ChanNum, item, function
```

This particular example opens a halFILE database. OPEN_DB is one of the supported viewer functions. These functions are explained in greater detail later in this document.

4. The Result item will allow you to get the return value of these functions:

```
item = "Result"  
somestring = DDERequest$ (ChanNum, item)
```

5. You must close the DDE Conversation before closing your application but the conversation may remain open while many items and functions are called.

```
DDETerminate ChanNum
```

The Action Item

OPEN_DB function - takes two parameters which represent the three letter application id and the 2 letter database id found in halFILE For Windows:

```
OPEN_DB(xxx;yy)
```

LOADFLD function – accepts an SQL statement that will retrieve the database fields.

```
LOADFLD(sql)
```

Typically this will be a sql statement like “select * from primetable where 0=1” to obtain a list of fieldnames with no actual data. The example sql statement is typically the fastest execution time on most platforms.

SELBASK function - no parameters - allows user to select the basket they wish to use when indexing.

SEEKREC function - takes two parameters. The sql statement necessary to retrieve the correct record and a flag to display the image or image and data . The format is as follows:

```
SEEKREC(sql;flag)
```

Sql is a SQL statement that retrieves a single row that is the document you wish to view. Ex: select * from primetable where file_number = '12345'

flag is zero or 1

1 - image and data
0 - image only

DDEINDX function - no parameters - displays the first scanned image that has not been indexed in the basket that was selected with SELBASK. This can be called until the basket is empty.

SAVEIND function - this can be called with the list of field values separated by commas to index the current image that was displayed with DDEINDX.

SAVEIND('Sample Text',null,1) would place SampleText in the first user defined field assigned to that document, null in the second and the numeric value 1 in the third.

CLEAR function - no parameters and will clear the image display window

EXIT function - will close the viewer and any files which may have been opened

MINIMAG , MININFO functions - minimize the image or minimize the database information windows

MAXIMAG , MAXINFO functions - maximize the image or database information windows

NRMIMAG , NRMINFO functions - make the image window or the database information window set back to the settings that were active before they were minimized or maximized

MOVIMAG(x,y) and MOVINFO(x,y) - move the image or database information window to the (left,top) position. This places the upper left hand corner of each window to the corresponding x and y values which are specified in twips.

The Result Item (True = -1; False = 0)

After OPEN_DB this will pass back true or false as to whether or not the viewer was able to open the database.

After SEEKREC this will pass back true or false as to whether or not the record was found.

The CALLVIEW Sample Program

This program demonstrates the use of all the DDE functions of the viewer and displays the actual call that was made in the Action box. The result box is a permanent open DDE conversation box between the viewer and the callview program. Any time a result value is passed from the viewer this box is automatically updated. This is a more efficient way of obtaining the return values than using LINKREQUEST as described above but not all environments support automatic links. This program also requires you to use the Open Viewer menu selection under file to shell to the viewer before the function and window control menus are enabled. At this point the automatic link for the return values is also established.