

yesyesyesyesTRUEnono&AboutC&loseC&opy&PrintnoPrinter Dialog  
Testprinteryes15/09/95

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Version 6.0c

9/13/95

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Click Here for Registration Information

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*Registration is required to obtain a license for the printer module code to import it into your database. Our primary goal has been to be helpful to other developers and users, however we have found it necessary to restrict open access to our code prior to registration. Source Code for the printer modules will be sent via e-mail to registered users. We will also will provide response to email questions from registered users inquiring about how to implement the functions. We know you value your time, and appreciate your value of ours.*

Help file produced by **HELLLP!** v2.3a , a product of Guy Software, on 9/15/95 for Unregistered User.

The above table of contents will be automatically completed and will also provide an excellent cross-reference for context strings and topic titles. You may leave it as your main table of contents for your help file, or you may create your own and cause it to be displayed instead by using the I button on the toolbar. This page will not be displayed as a topic. It is given a context string of `__` and a HelpContextID property of 32517, but these are not presented for jump selection.

HINT: If you do not wish some of your topics to appear in the table of contents as displayed to your users (you may want them ONLY as PopUps), move the lines with their titles and contexts to below this point. If you do this remember to move the whole line, not part. As an alternative, you may wish to set up your own table of contents, see Help under The Structure of a Help File.

Do not delete any codes in the area above the Table of Contents title, they are used internally by HELLLP!

Registration

What's new in "On the Fly" (release history and modifications)

## On the Fly Printer Setup in Access 2.0

### The Problems with Printing

A major hurdle for developing Microsoft Access applications which are high on usability, is the inability for the user to direct or redirect a selected report to a selected printer device "on the fly" when a Print command button is pushed on a form.

Access 2.0 stores in hard coded format, the printer setup within the report document itself. The only way to change the selected printer device is to open a report in either design mode or in print preview and change the printer setup there before printing. Opening a report in preview, prior to changing the printer setup requires two compiles for the report. Once to preview and once to print. This slows down printing beyond acceptable time frames for most applications. Opening a report in design mode presents the user with a potentially confusing interface. (They can't open it in design mode if you distribute your application with the runtime version of Access.)

Changing printer devices in this fashion becomes cumbersome, especially when a print device might be changed often, (in a multi-user environment) or if you have designed your application for mobile users who may often switch between sending a report to a printer or to a fax device. In addition, if you have a series of reports (such as Invoices, Invoice details, and Mailing Labels) which are normally printed in a batch, this would mean opening multiple reports to change print settings.

If you want to print reports "to file" using Access Basic, there is no standard Access method or "action" to open a report in a fashion to be able to do so.

### Our Solution

With these problems at hand the Printer Functions Module in the Printer.MDB database was our solution. This module includes five functions, which use the Windows API and the scantily documented PrtDevNames and PrtDevMode properties of Access reports, to achieve significantly enhanced printing capabilities.

Our routines provide the user, through one click of a print command button on a form to:

- 1.) Change the printer device to any printer on the system, including fax and network printers allowing all the options normally available in the Windows Print Dialog such as such as number of copies, paper tray, and print to file etc.
- 2.) The ability to spool multiple reports to a common printer.
- 3.) The ability to print to file.

For the developer, these routines have been rewritten to assure compatability with Access95.

The routines can also be used to initiate or cancel follow-up actions to a print job such as running an update query to record the issuing or a payroll.

(Note because these functions rely on opening a report in the background, unseen to the user, you may need to rethink about how you set up security and permissions for reports if you haven't provided access to design mode for most objects in the database when used under retail Access.)

### How to Get a copy of the Module for your database use.

If you would like a shareware copy of the modules which includes the source code so that you can use them in your database, you will need to register with us. Upon registration, a file with the code will be emailed to you. If you're not familiar with the Windows API be cautious about changing much, otherwise

you might encounter the ubiquitous "General Protection Fault".

## "On the Fly" Release and Enhancement History

### Release 6, July 5, 1995

Added Print to file capabilities to the functions. **Note:** *certain printer drivers don't support print to file operations. An example of this is WinFaxPro. If you print to file with this printer selected, it will still launch Winfax, and operate just as if it were a normal print operation. This is the same behavior that this printer driver displays when run normally in Access or any other Windows application.*

Significant revisions to assure compatibility with Access95

### Release 5 -- April 10, 1995 Changes, Release 5a April 13, 1995

1.) Printer availability checking was added to the initialization function for the Print Dialog. Specifically, if an Access report was saved with a specified printer which **is not** available on the PC which the application is running on, the Print Dialog now initializes with the Default printer as specified in Win.ini. (This could happen if mdb files are moved from PC to PC and printer devices for each are different.) If there is no default printer specified or if no printers have been installed, then an error message is shown and report print job is canceled.

2.) A Savelnit flag was added to the SetPrint function which if set, causes the report(s) printed to retain its (their) initial printer device specification, i.e. before it was changed by the user through the print dialog. Specifying -1 in the Flag saves with the initial printer device specifications. 0 or any other value saves the report with the new user selected printer device specifications.

3.) Version 5a had a minor change to add compatibility for Windows 95. In win95 the printer devmode data tends to be a little longer in its string format, so the length of the condevmodestr data type was increased from 768 to 1280.

### Release 4 -- March 22, 1995 Changes

The functions were revised to accommodate printers which have a printer driver which requires optional printer setup data (e.g. postscript printers)

Screen Flicker was reduced by adding the use of the "Lock Window" API call rather than just relying on use of Echo off commands. The additional advantage of this functionality is that if the report was saved with the "properties" box displayed in design mode, the properties box is no longer visible to the user when the report is opened to set up printing.

### Release 3 -- January 28, 1995 Changes

Resolved a bug which resulted in a General Protection Fault when the user selected a new printer device in the Print set up dialog and subsequently pressed cancel in the Print Dialog.

### Release 2 -- January 8, 1995

Changed SetPrint function to use the Print Action rather than the Open Report Method because Open Report will only print one copy of the report even though a change in the prtdevmode property set the report up for multiple copies.

Eliminated use of changing the dmcopies member of prtdevmode structure to determine number of copies to be printed (as is suggested in the example of use of the prtdevmode property by Microsoft in the retail version of their help file,) rather using the Print Action number of copies parameter. this allows the report to be saved with a default copy number of one which is clear coding for administration of future releases of any reports.



**"On the Fly" Printing in Access 2**

*Shareware Registration is \$10.00 (US)*

**"On the Fly" Printing in Access 7**

*Shareware Registration is \$25.00 (US)*

**Registration fees may be mailed to:**

ATTAC Consulting Group

2869 Baylis

Ann Arbor, MI 48108 USA

e-mail: 75323.2112@compuserve.com

*Please be sure to include an e-mail address*

*Sorry we don't accept credit cards-----*

**Compuserve Members Register in the Shareware Forum: GO "SWReg"**

**"On the Fly" Printing in Access 2**

SW program registration # = 5816

SW Title is "On the Fly" Printer Setup Access2

**"On the Fly" Printing in Access 7**

SW program registration # = 7535

SW Title is "On the Fly" Printing in Access 7

*Registration is required to obtain a shareware level license to the code for the printer functions module to import into your database. Developers seeking to use the code in distributed app should contact us regarding a distribution license.. Source Code for the printer modules will be sent via e-mail to registered users. We will also will provide response to email questions from registered users inquiring about how to implement the functions.*



## Using/Calling the Functions

**Note:** if you have the following line in your MSACC20.ini " UseDefaultPrSetup=1" it must be removed for these functions to work properly.

### Using Access Basic:

Calling the functions from Access Basic is illustrated in the on click event of the printer form, print command button.

### Using a Macro:

To call these functions from a Macro doesn't take a great deal of work or programming knowledge. Any one who has worked with macros in the past can implement use of these modules in order to make them work in your application.

### Single Report Implementation

This discussion assumes that you have a report "MyReport", you want one copy printed, its the only report your printing, and you don't want to have the report saved with the new printer settings selected at runtime.)

Steps:

- 1.) Import the Print Functions module into your database, after you have registered.
- 2.) Create a new Macro
- 3.) Show the Macro Names column and give the Macro a name.
- 4.) If you want to print only one report then choose the "RunCode" option in the Action column and in the space provided to name the function type: SetPrint("MyReport",-1,1,-1)

The paramters required for the SetPrint Function are:

Parameter	Data Required
ReportName	String ("Report Name")
First report (flag)	-1 or 0 (True or False)
Default Number of Copies	Integer>0
Save report with initial printer settings (flag)	-1 or 0 (True or False)

*Note A:* If you want to take an action after the reports are printed, call the functions in the following manner:

In the Conditions column type SetPrint("MyReport",-1,1,-1) = -1 (i.e the printing was successful). In the Action Column Select the action you want to take after printing such as running a query or displaying a message.

### Multiple Report Implementation:

To Spool a number of reports (i.e. print them all in a batch to the same printer then,) call the functions in the same manner as you would if you want to take an action as in Note A above. in the Action column, leave that blank. In the line below the first set print call, place an ellipsis (...) in the conditions column, and then in the Action column choose Runcode. In the space provided to name the function then type SetPrint("MySecondReportName",0,1,-1). Follow the same steps for report three or more.

If you want to change the printer device stored with the report to the one selected when the user picks a printer at run time then simply change the last parameter in the SetPrint function to "0" from -1.

## Windows 95 and Access95

### Windows 95

"On the Fly" Printing in Access 2 has been fully tested with Access version 2 operating under Windows 95, and is 100% compatible with that operating system running the 16 bit app.

### "On The Fly Printing in Access 2" and Access 95

The "On the Fly" Printing Access 2 modules **are not** compatible with Access Version 7, and are designed to be used under Access version 2.x only. If you convert an Access 2 database containing this the "On the Fly" module in it to Access 7, the print functions will not work.

However a [new version](#) called **"On the Fly" Printing in Access 7 is available** and provides virtually the same functionality demonstrated in this sample database. The module code which drives the functionality demonstrated in the sample database has been re-written (ported) to provide functionality in Access 95 (version 7).

### Notes on Porting Application Code to Access 95 (Access version 7)

Access 95 is expected to be released late in 1995 (60-90 days or so after Windows 95). Most users purchasing Access 95 will want to run their legacy applications and databases built using Access 2.0. A number of issues are important to note related to running legacy databases or applications *designed* using Access 2.0 and eventually *run* under Access 95:

1. Access 95 is a 32 bit application. As such, any call to a 16 bit Windows API function such as those used by this and prior versions of the "On the Fly" modules for Access 2.0 use, (and any other module level API call in your database) will need to be "re written" if the existing database is run under the new 32 bit application. All the new 32 bit applications (Access95, Word95, Excell95 etc.,) can only call the Win32 APIs and DLLs and can not call the win16 API and DLLs.

Therefore, if a database or module code written in Access 2.0 calls any 16 bit API functions or DLLs when it is running under Access95, the functions do not work.

2. Access 95 (along with Visual Basic version 4) implements Access Basic in a completely new fashion. Technically, this means that under the "skin" which the user see's, (which doesn't appear changed), Access Basic is in fact implemented in Unicode. This requires that certain string properties of objects such as reports must be converted between between ANSI and Unicode before they can be manipulated. Fortunately, Access 7 provides native internal functions to accomplish this manipulation. However, since these functions are not native, internal functions to Access 2, code can not be combined in one module which supports both versions of Access if you're working with certain string properties of objects.

