Extend Q&A's Reach with Windows Scripts

How can you make your Q&A data more accessible to other programs on your computer? This unexpected and powerful tool can do the trick—and it's free.

Our 10th Anniversary! June 1990 - June 2000 The Do-It-Yourself Guide to Q&A

June 2000

Volume 11, Number 6

Tom Marcellus

Remember the old days of Windows 3.1 and "Recorder"? You could start Recorder, press a bunch of keys to perform some task in Windows, and save the sequence to a Recorder file for instant playback with a hot-key. You couldn't modify these macros once you recorded them—you had to *re*-record them—but if you managed to get it right, they could save you a lot of time and keystrokes by automating repetitive tasks.

Windows 95 and 98 lack anything like Recorder. But something far more powerful comes in Windows 2000—an automation tool called *Windows Scripting Host* (WSH). With it you can create very intelligent editable scripts that you can also create and use in Windows 95/98—and the package won't cost you a dime.

Sort of like DOS batch files on steroids, WSH scripts can automate the most complex tasks. The rich scripting language is essentially Visual Basic for Applications (VBA), so if you're familiar with Q&A's own Basic-like programming language, you'll have a head start on VBA.

Although WSH scripts won't run *in* Q&A, you can launch them *from* Q&A running in Windows 95, 98 or 2000. I'll show you some ways I've used WSH to perform Q&A-related tasks, then tell you how to get it.

Your basic file I/O operations

In past issues of *The Quick Answer* we've shown a variety of ways to pass Q&A for DOS data *on-the-fly* to external programs such as Microsoft Word in order to merge-print fancy-looking invoices and snazzy merge documents in Word.

One technique we've explored (See "Merge-Print Invoices & Forms in Windows" in the August 1998 issue) uses a Q&A program to assemble a lengthy text string in a designated database field, then pass that string via Q&A 5.0's External Programs "G temporary file parameter to a DOS batch file which then saves it to an "export" file before starting the external program that uses it. The relevant line in the batch file looks like this:

Copy %1 C:\QA\QAData.txt
Windows program to run

For small amounts of text, such as a name and address, we've shown how to use Q&A 5.0's @Shell command with the DOS Echo command to save a text file containing the data from the record you're viewing. (See "Exporting Data to Windows Programs" in the December 1997 issue.):

< If TextField <> "" Then
@Msg(@Shell("echo " + TextField + " > C:\QA\QAData.txt "))

To *append* the TextField data text to the QAData.txt file, you use double right angle brackets, like this:

- I Windows Scripts
 Tom Marcellus
- 2 A Retrospective
- 2 QuickTip—Track Down Corruption
- 6 @Help—Edited by Bill Halpern
 Where'd My Fonts Go? Too Many
 Users? When Batch Posting Beats
 XPosting Stamp Records with User ID
 Get Wider Pick-Lists Avoid Duplicate
 Records Database Server Drive Size
- 8 My Top 10 Quick Answer Favorites
 David Dvorin
- 9 QuickTip—@Shell and Batch Files
- 9 QuickTip—Set Your Network ID!
- 10 My 10 Best Tips for Q&A Users Alec Mulvey
- 10 QuickTip—Auto-Print Multiple Copies of a Form or Report
- 11 My Favourite Quick Answer Articles Alec Mulvey
- 12 Crossword Puzzle

MARBLE

@Msg(@Shell("Echo " + TextField + "
>> C:\QA\QAData.txt "))

This technique limits you to about 120 characters at a time.

A third way to create an external text file on-the-fly uses a macro to save the contents of the field you're in to a disk file by expanding the field, pressing F2 for Print Options, and selecting *Print to DISK*. Such a macro looks like this:

 $\label{lem:condition} $$ \end{substitute} $$ \operatorname{cond}_{\condition} \end{subst$

A Retrospective

Tom Marcellus

READER once told me that *The Quick Answer* gave him indigestion. I was pondering whether to take it personally or suggest Rolaids when he chuckled and explained that there was just too little time and too much in each issue for him to digest it all.

We've endeavored to fill each issue with mainly undocumented Q&A solutions. If we've focused too much on the needs of the Q&A developer community as a result of that, it's because that's where our own interests have been and because we've wanted the newsletter to be of greatest value to folks who made the investment in Q&A and us. Q&A "users" tend to be the creators of the applications they rely on day after day. That non-technical people can do so with Q&A is what made it so popular over the years and still makes people the world over refuse to give it up.

As for "too much," here are a few stats: Since our inaugural June 1990 issue, we've managed to bring you 1,529 Q&A tips, articles and @Help questions and answers written by 123 different authors in 121 issues comprising a total of 1,464 pages. That's a lotta Q&A know-how regardless of the level of expertise required to digest it.

And we have people to thank for all this know-how. Bill Halpern's Q&A savvy and willingness to assist whenever asked have made things much easier for us. T.J. Shuflin's proofreading of each issue and regular updates to *The Quick Answer* Index Database have been immensely valuable. Gordon Meigs, Alec Mulvey, Dave Dvorin, Erika Yoxall and John Dow deserve special thanks for documenting their Q&A solutions in a way that enabled the rest of us to benefit from them. We'd also like to thank Andreas Goebel and Mike Bell. Andreas, for giving us Q&A 5.0 and Mike, because he prototyped most of the features that went into it. Mike also made it possible for us to acquire The Quick Answer and served as its publisher for several years.

Finally, thank *you* for your part in making this newsletter a success. No retrospective gets away without a word about the future which, in this case, is all about the investment you've made in your Q&A data and applications. You'll need to keep them intact and running smoothly as computer hardware, operating systems and networking inevitably advance in the years to come. Rest assured, we're working on just that. Stay tuned.



Tracking Down the Source of Corruption

I know from experience with

"problem" Q&A 5.0 databases that when all the usual remedies fail (Recovery, Generation 1 techniques, copying out the records, DTFDOCTR, etc.), the chances are good that the problem is due to a corrupt record. And when all efforts to isolate the corrupt record fail, I still have one more weapon in my arsenal. I copy the design of the database, then copy all the records from the problem database to the new one. I specify an ascending sort, and Q&A will usually

"bomb" when it hits the corrupt record. I then copy all the records to the new database again, but this time with a descending sort. Once again, Q&A will screech to a halt when it hits the bad record. Interestingly, Q&A will copy the corrupt record to the new database during both copy operations as the last record copied. If I then go in

and delete the duplicate corrupt records, the problem with the

database disappears.

Editor / Publisher Tom Marcellus

The Quick Answer (ISSN 1052-3820) is published monthly (12 times per year) by Marble Publications, Inc., 1927A Harbor Blvd., Costa Mesa, CA 92627 USA

Cost of domestic subscriptions: 12 issues, \$109; Outside the U.S., \$129; Online edition, \$79. Single copy price: \$11; outside the U.S., \$12.50. All funds must be in U.S. currency. Back issues are available upon request for the same price as a single copy.

POSTMASTER: Send address changes to The Quick Answer, 1927A Harbor Blvd., Costa Mesa, CA 92627.

Copyright © 2000 by Marble Publications, Inc. All rights reserved. No part of this periodical may be used or reproduced in any fashion (except in the case of brief quotations embodied in articles and reviews) without the prior written consent of Marble Publications, Inc.

Address editorial correspondence, @HELP questions, or requests for special permission to: Marble Publications, Inc., The Quick Answer, 1927A Harbor Blvd., Costa Mesa, CA 92627 Phone 800-780-5474 or 949-722-9127. Fax 949-722-9127, mailbox@quickanswer.com

On the Web at www.quickanswer.com

O&A is a trademark of Symantec Corp. Other brand and product names are trademarks or registered trademarks of their respective holders.

This publication is intended as a general guide. It covers a highly technical and complex subject and should not be used for making decisions concerning specific products or applications. This publication is sold as is. without warranty of any kind, either express or implied, including but not limited to implied warranties for the publication, quality, performance, merchantability, or fitness for any particular purpose. Marble Publications, Inc., shall not be liable to the purchaser or any other person or entity with respect to any liability, loss, or damage caused or alleged to be caused directly or indirectly by this publication. Articles published in The Quick Answer do not necessarily reflect the viewpoint of Marble Publications, Inc.

Reach Us

Phone 800-780-5474 / 949-722-9127 949-722-9127 Fax

Email mailbox@quickanswer.com Web http://www.quickanswer.com Mail Marble Publications

> The Ouick Answer 1927A Harbor Blvd. Costa Mesa, CA 92627 USA

Mike Bell, mbell@mhtinc.com

Windows Scripts...cont'd from page 1

The problem with this method is that, for some reason, Q&A adds two oddball characters to the end of the file (Hex 0C and 1A) that Windows programs don't recognize. (They usually appear as garbage characters in Windows programs.) Bummer, because I've always liked this method's simplicity and the fact that it creates an otherwise useful plain text export file on-the-fly in Q&A 4.0 as well as Q&A 5.0.

With Windows Scripting Host, though, I had a way out. For a Q&A 5.0 application, I used a macro to generate the output file as above, then used @Shell to call a WSH script to strip out the unwanted characters.

For this, you program your database to assemble the data in a field I'll call **Data**. To the immediate right of Data, you have an invisible labelless field I'll call **Temp**. You invoke your macro in the Data field (to "print" the data to a DISK file), and the final <tab> in the macro advances the cursor to the Temp field and runs this program:

```
@Msg(@Shell("CScript QAData.wsf"))
```

In this case, the QAData.wsf script file ("wsf" stands for *Windows Scripting File*) is in the main Q&A directory, so no path is required. Listing 1 shows the script.

How the script works

The <package> tag at the beginning of the script gives you a way to store multiple scripts in a single wsf file. Each script has it's own <Job ID = "name"> tag. (More on this

```
<package>
<Job id="QAClean">
<script language="vbscript">
"### Strips garbage characters from end of Q&A file
Set MyObject = CreateObject("Scripting.FileSystemObject")
Set MyFile = MyObject.OpenTextFile("D:\QA\QAData.txt")
MyData = MyFile.ReadAll
MyData = Left(MyData, Len(MyData) -3)
MyFile.Close
Set MyObject = nothing
Set MyObject = CreateObject("Scripting.FileSystemObject")
Set MyFile = MyObject.CreateTextFile("D:\QA\QAData.txt")
MyFile.Write(MyData)
MyFile.Close
Set MyObject = nothing
</script>
</job>
</package>
```

Listing 1. A WSH script that cleans up a Q&A output file.

later.) Following that, the *<script language="...">* tag tells WSH which scripting language to use—you have your choice of VBScript (recommended) or JScript, Microsoft's incarnation of JavaScript.

The script then proceeds to create a file system object that reads in the data from QAData.txt file, lops off the extraneous characters that Q&A placed at the end of the file, then creates another file system object and writes the scrubbed data back to the same file. The file is now ready for use in any Windows program (or in Q&A).

Because WSH script files are plain text files, you can compose them in Q&A Write. Just be sure to save them with Ctrl-F8 (as an ASCII file) instead of the usual Shift-F8, and give them a .wsf filename extension.

Advanced tricks

There's much more you can do with a WSH script. You can, for example, append very lengthy strings of data from a Q&A database record to the end of an existing text file and thus build up a file that contains any number of lines comprising selected data from selected Q&A database records. This can make an excellent mail merge data source file for Microsoft Word. Listing 2 on the following page shows an example of a *second* script (job) added to the *same* QAData.wsf script file between the </ job> and </ package> tags in the previous script

This script uses a variation of the OpenTextFile method you saw in the first script, except here the "8" parameter opens the file for *appending* data (instead of *overwriting*), and the "True" switch creates the text file if it doesn't already exist.

With two different jobs in the same script, you'll need two @Shell programs, each with its own Job ID. This one to clean and save the file:

```
@Msg(@Shell("CScript //job:QAClean
QAData.wsf"))
```

And this one to append the cleaned file to a second file:

```
@Msg(@Shell("CScript //job:QAAppend
QAData.wsf"))
```

You wouldn't need two @Shells, however, for a script containing a single job that performed both operations one after the other—you'd just call the script.

Starting and controlling other programs

You can use WSH's powerful AppActivate and SendKeys commands to start a Windows program and pass keystrokes to it that perform a series of tasks. Listing 3 on the next page is a *third* job you can add to the same QAData.wsf script file. This one starts Microsoft Word and inserts, in a new Word document, the QAData2.txt file created by the previous job.

The Quick Answer June 2000

Listing 2. A script that appends the data from one file to another one

For this one, your @Shell command might be: @Msg(@Shell("CScript //job:TextFileToWord QAData.wsf"))

Here, you're telling the script which program to run, then activating it. The *Sleep* command pauses the script for five seconds while Word loads, then the *SendKeys* command sends the following keystrokes to Word:

%I Alt-I pulls down Word's Insert menu
L Chooses the File selection
D:\QA\QAData2.txt Specifies the file to insert
Inserts the file

As part of this script's *Return* variable, you could tack on the path to an existing document for Word to open on startup (Winword.exe, a space, then the path to the Word document), then have your script insert the text file at a strategic spot within that document, ready to print, fax or whatever. You could even have your script send the keystrokes to format the inserted text file, such as indenting its paragraphs or fonting the text. It's *not* a good idea, though, to use SendKeys to send lengthy text blocks.

Automating email

Here's an example that launches the Eudora Pro 4.0 email program and fills in the Name/Email address and Subject fields for a new email message. (This or a similar script should work with Outlook Express as well.) This example assumes you have corresponding fields in your Q&A database, have assembled the data in a temporary field (called **Temp**) with each value separated by a "^" character, and are using the macro technique described earlier that saves the file by expanding the field and using Print Options to print the data to disk

The **Temp** field might contain a value like this:

Jim Smith^jsmith@somewhere.com^Your Subscription has Expired

The @Shell program might look like this in a **Send Mail** field:

< Send Mail = @Shell("CScript
Eudora.wsf")</pre>

And finally, the Eudora.wsf script file might look like Listing 4 on the next page.

The Listing 4 script reads the line from the Eudora.txt file, parses it into an array (a variable containing multiple values), then assigns the array values to the appropriate variables (Contact, EmailAddress, and Subject). It places the Email address inside angle brackets (Eudora wants this when the recipient's name and email address are on the same

To: line), then launches Eudora. After giving Eudora a few seconds to load, SendKeys "presses" *Alt-M* to pull down the *Message* menu, *N* to select *New Message*, then fills in the Name, Email address, and Subject lines, pausing between each one to give Eudora time to "digest" the new data.

So basically, all you have to do is click on a field in your Q&A database and you're ready to type your preaddressed message in your email program and click Send. When you quit Eudora, you're returned to the same Q&A record you left.

Conclusion

I've shown just a scant few of the things you can do with Windows Scripting Host scripts. You can perform all kinds of file manipulation tasks (including checking to see if a file exists before doing something with it), get extensive system information from your computer, check who's logged on to the network, and the like.

You can optionally create desktop shortcuts for your scripts—you don't have to run them via @Shell in Q&A. In

```
<Job id="TextFileToWord">
<object id="shell" progid="Wscript.Shell"/>
<script language="vbscript">

Return = shell.Run("g:\word97\office\winword.exe")
shell.AppActivate Return
Wscript.Sleep(5000)

'### Send keystrokes to insert the text file
shell.SendKeys "%ild:\qa\QAData2.txt{ENTER}"

</script>
</job>
```

Listing 3. This script starts MS Word and inserts a Q&A output file.

some cases, it might be just as easy to minimize Q&A or put it in a window with Alt-Enter and click a shortcut to run the script. When you create a shortcut for a WSH script, your target can be something like C:\QA\filename.wsf if the script file is located in the C:\QA directory.

Next month, using WSH to send a fax from a Q&A database record. In the meantime—have fun!

Tom Marcellus has served as the editor of *The Quick Answer* since it's inaugural June 1990 issue.

For Q&A 4.0 or Q&A Win

Q&A 4.0 doesn't have Q&A 5.0's External Programs feature, @Shell command, or the @Macro command that runs a macro from a program. Here's what you'll need to run a WHS script from inside Q&A 4.0 (except as noted for shortcut key scripts as described in the sidebar, "Professional Driver. Closed Course"):

Create a DOS batch file (I'll call it Myscript.bat)
 containing these commands if your script files are
 stored in your Q&A program files directory:

```
Wscript myscript.wsf
```

- Create a Main menu Alternate program to run your batch file. In this case, the program would be simply MyScript.bat if the batch file is in your Q&A program files directory.
- 3. Create a macro like the one shown earlier that saves the contents of a database field to a disk file, but include in the macro the commands to then save the record, escape back to the Main menu, and invoke the Alternate Program.

To run the procedure, press the macro's key identifier (such as Alt-Q) from the field that contains the data you want to save to a disk file and pass to the script file.

If you don't have enough Alternate Program slots for all the scripts you might want to use, see "All the Alternate Programs You Could Want" in the February 2000 issue.

If you're using Q&A for Windows, you'll have to generate your text file in Q&A, then click on a desktop shortcut you've created to run the appropriate WSH script. (Except as noted in the sidebar.) In batch files, use the *WScript* command. For @Shell and DOS command line use, the *CScript* command works better.

```
<Job id="Eudora">
<object id="shell" progid="Wscript.Shell"/>
<script language="vbscript">
`### Read in the data, parse it into an array,
"### then send the data to Eudora via SendKeys.
"### String assumed to be "" delimited.
Set MyObj = CreateObject("Scripting.FileSystemObject")
Set MyFile = MyObject.OpenTextFile("d:\qa\Eudora.txt")
MyLine = MyFile.ReadLine
MyFile.Close
Set MyObj = nothing
MyArray = Split(MyLine, "^")
Contact = MyArray(0)
EmailAddress = "<" & MyArray(1) & ">"
Subject = MyArray(2)
Return = shell.Run("E:\Eudora\Eudora.exe")
shell.AppActivate Return
WScript.Sleep(5000)
"### Send keystrokes to "type" the recipient's name,
`### Email address and subject into pertinent fields
shell.SendKeys "%mn"
WScript.Sleep(200)
shell.SendKeys Contact
shell.SendKeys EmailAddress
WScript.Sleep(200)
shell.SendKeys "{TAB}"
WScript.Sleep(200)
shell.SendKeys Subject
</script>
</job>
```

Listing 4. This script passes the Name, Email address and subject from a Q&A output file to a new email message in an email program.

Run Hot-Key Scripts 'Behind' Q&A

Here's a totally unexpected thing about WSH scripts (at least on my Windows 98 PC). If you create a desktop shortcut for one and assign it a Windows shortcut key such as Ctrl+Alt+Q, you'll be able to press Ctrl+Alt+Q from anywhere in Q&A for DOS (whether running in full screen or in a window) or Q&A for Windows, and the script will run in the background!

Where to Get WSH

Windows Scripting Host works in Windows 95, 98, 2000 and NT. You can download it free at http://msdn.microsoft.com/scripting. Be sure to download the VBScript documentation separately. Copy the files to a new directory, then Run them to complete the installation.

If you're running Windows 95 Release 1 or you don't have Internet Explorer 4.0 or later, you'll also need to download and install a file named DCOM95.EXE from the same area of the site.

(If you need help creating or using WHS scripts, we'll be happy to provide technical assistance on a paid basis.)

The Quick Answer June 2000 5



EDITED BY WILLIAM HALPERN



Hey! Where'd My Fonts Go?

I recently transferred my Q&A program and files to a new PC and now I can't find the fonts to use with my HP LaserJet. I thought they were there from the original installation—but apparently not. Can I download them from somewhere?

Michael Edwards

Font files (printer drivers) are copied to your hard drive during a normal Q&A for DOS installation. However, because you can choose which ones to install and where to put them, you might have installed them in a \FONTS or other special directory that you didn't copy over to your new PC with the rest of your Q&A files. The location of your Q&A font files are stored in your QA.CFG file, which you can't edit. Go to www.quickanswer.com_and click on the Free Downloads link. There you'll find *5printer.zip*—a file containing all the latest printer drivers and fonts you can use with either Q&A 4.0 or 5.0.

Too Many Users?

We've been using Q&A for DOS for a long time. Out of the blue, we've started receiving error messages telling us that we have "Too Many Users." We're using the Q&A Network Pack with 10 licenses, but only four people ever use Q&A. What's making Q&A think that 10 people are using it?

Jim McPaul

Someone was (is) using Q&A and either got locked up or shut down his PC without properly exiting Q&A. That user might have been logged on as user #5 or #6 at the time. Now, every additional user starts at #6. Try rebooting your server. Then, start one copy of Q&A and see what the count is. If it's back to 1, you're in business. If not, the file that stores the user count—QAOVR19.OVL—will need to be replaced. Let us know (along with your Q&A version) and we'll send you a new one. Copy it into your Q&A program files directory to reset the count.

Y2K Crosstab Bug Back Again

I've come across a Y2K-related bug in QA for DOS 5.01. We run a Crosstab report that covers 1999 and 2000 dates. If we

specify the Date field as, say, the ROW, and use @Month for the Group, when we print it to the Screen or Print Preview, Q&A displays all the data correctly. But when we try to print it to a printer, Q&A won't show any data for JAN00, FEB00, etc. If we restrict the report to dates *after* 1/1/2000, the report prints fine. Any ideas?

We responded to an earlier, similar question this way:

Yup, you seem to have found a bug. However, the fix is really easy! All you have to do is make sure that your ROW specification reads ROW, F(D16) instead of just ROW and your printer will print all the data properly. Without telling Q&A to use the long date format in the report Spec, it doesn't seem to be able to send the correct format to the printer and the calculations for the summary fields get zeroed.

This solution works *most* of the time. After some further testing, we found that Q&A 5.0 Crosstabs using date fields grouped with the @Month function will sometimes behave this way when trying to summarize year 2000 data. This occurs only when you initially preview the report on screen then press F2 to reprint it to the printer. It *doesn't* occur if you print directly to the printer without first previewing. You can avoid the bug by skipping the preview. If you must preview, escape out after doing so and print the report directly to the printer.

XPosting vs. Batch Posting

XPost doesn't seem to work when I use it in a "looping macro" that goes through the day's invoices and posts each invoice's quantity field to the related inventory record. The problem is that it doesn't activate the programming in the target database. For example, an XPost will subtract 1 from the target inventory record's quantity-on-hand field, but other related fields in the same record aren't updated. If I actually go to the quantity-on-hand field in that inventory record, its program will update other fields in the record, as it should. Can't XPost do this?

Chris





Send your Q&A questions to @Help, The Quick Answer, Marble Publications, Inc., 1927A Harbor Blvd, Costa Mesa, CA 92627 or email to mailbox@quickanswer.com. Include your name, address, phone, and your

Q&A version number (and whether DOS or Windows) and a detailed description of the problem. We'll publish those questions we feel are of general reader interest; individual responses aren't possible.

6

For an end-of-day posting, you should be using Q&A's *Batch Posting* feature, not Q&A 5.0's XPost. XPosting can't execute programming in the target database. It's just a kind of XLookup in reverse. Batch Posting, in contrast, gives you the option of executing On-Record-Entry and/

or On-Record-Exit programming in the target record during the post. So, in addition to subtracting an invoice quantity from the inventory quantity-onhand, Batch Posting can run programming to increment a sold-to-date field in the same inventory record. Another benefit of Batch Posting is that it runs like a Mass Update—with a Retrieve Spec. Selecting the records from the source (post from) database makes it easy to post, say, just today's invoices. With Batch Posting, you can say adios to that "looping" macro.

Stamp Records with User ID

In our work order database, users have to manually input their name or initials. Can this information be inserted automatically from the user's Network ID or Computer ID?

Mike Scully

If your users are entering a User ID and/or password to access the database, then you can use Q&A's @Userid function to automatically enter their ID in the record. If the first field on the form is **Updated By**, you could program it this way:

<#10: If @Add then { #10 = @Userid; Cnext };
If @Modified then { #10 = @Userid; Cnext}; Cnext</pre>

This will auto-fill the field with user's ID when a record is added or changed, but not when it's merely viewed. And it won't leave the cursor in the field. You can optionally make the field Read Only so that no one can change it.

Wide Pick-List Needed

In our work order database we have a line-item section for part numbers, descriptions and prices. Can we program Q&A to take the user to a table or menu where they can select a part from a list and have Q&A then insert the part number, description and price in the work order?

Mike Scully

Super-wide pick-lists are possible with programming, a macro, and John Dow's DTFDATA (www.johntdow.com). You can set up DTFDATA to display a full or partial list of inventory items showing the part number, description, price, and quantity on hand, sorted pretty much any way

you want. A macro could then let the user place the cursor on a specific item and press Enter to pop the data into the fields. It takes a bit to set it up, but it makes this kind of data entry easy. For more on this, see "When XUserselect Lists Aren't Enough" in the October 1998 issue.

0&A and Win 2000 Corrrection

Last month in my Windows 2000 review, I stated that, "not only won't your mouse work in windowed mode, it won't work in full screen mode, either." Well, a savvy computer guru informed me that you can make the mouse work in Q&A running in Win 2000. After setting up Q&A properly, start it, put it in a window, and click on the icon in the upper left hand corner of the title bar. Select Defaults from the drop-down menu, then, on the Options tab, uncheck Quick Edit Mode. This will give you back your mouse. To use the mouse to select text, however, you'll need to choose Edit – Mark from the same menu. So, Q&A for DOS continues to thrive in almost any environment.

Avoiding Duplicate "Open" Work Orders

Our work order database uses phone numbers as unique record identifiers. When a user starts a new work order, the status field is set to "Open." How can we get Q&A to check to see if there are any other Open work orders with the same telephone number. If there are, can we move the data to the open work order and cancel the new one? We're trying to cut down on duplicate work orders.

Mike Scully

Finding the same phone number in the database can be done with an "internal" XLookup. If the same phone number might occur in several records, though, this won't tell you how many there are. In this case, you could program a new Speedy field to combine the phone number with, say, an "O" for open (212-555-5678O) or "C" for closed (212-555-5678C) when the record is opened or closed. This way, a program could XLookup the *phone number+O* to see if any other open record exists for that phone number.

Server Databases and Hard Drive Size

I'm aware that Q&A must run on a hard drive smaller than 2G. But all of our database files reside on the server. Do these files also need to be in a partition smaller than 2G?

Mike Scully

Definitely. But LESSPACE can save you from having to partition your server's drive. You can get LESSPACE from our Web site (www.pcta-usa.com) and use a batch file like the following to start Q&A on each machine:

@echo off
D:
cd\qa5
lesspace
qa.com
D:
cd\qa5
lesspace /u

Bill Halpern owns Professional Computer Technology Associates (PCTA) in Newtown, Pennsylvania, 215-598-8440, www.pcta-usa.com, email pcta@comcat.com.

The Quick Answer June 2000 7



My Top 10 Favorites from The Quick Answer's First 10 Years



DAVID DVORIN

this month and, over the years, it has been a focal point for the Q&A community. I have been fortunate to be a part of *The Quick Answer's* history by being a contributing author almost since its inception. I have also had the honor of being a speaker at a number of Q&A Masters Seminars and Q&A National User Group Bashes. In celebrating this, *The Quick Answer's* 10th anniversary, I want to give you my take on the publication's Top Ten contributions to the Q&A community.

#10—Database Forms As Custom Menu Systems

Appearing in the June 1996 issue, Bill Halpern showed how to overcome Q&A's finicky custom menu facilities by using a Q&A database instead in his "Who Needs Custom Menus?" article. Using a database as a shell, the door opens to different types of menus with color, free text, drop down menus and an unlimited hierarchy structure.

#9—Multiple Q&A Configurations

I have been involved in a number of situations where Q&A needed to be available in different configurations even on the same machine. Steve Nix had a QuickTip published back in the March 1991 issue that described how different macro files could be loaded into memory. Emmett Dulaney wrote another QuickTip in the December 1992 issue showing how different Q&A configurations could be swapped in and out of memory. Both techniques use batch files. Put the two together and just about any aspect of Q&A's environment can be tailored and run from a single starting point whether it be a batch file or a desktop icon. [See also "The Ultimate Application Switcher" in the July 1999 issue. —Ed.]

#8—QEXTRACT for Salvaging Data

In times of database trouble, the first thing you want to know is whether your data is safe. When all seems hopeless, QEXTRACT may be the only alternative. Back in the October 1994 issue, I reviewed this free Symantec utility that never made it out of the beta stage. John Dow had another article on it that appeared in the January 1997 issue. QEXTRACT is still available from the Free Downloads page at *The Quick Answer's* web site (www.quickanswer.com) and should be part of any Q&A user's toolkit.

#7—Passing Retrieval Variables Between Files

Having several databases that need to "talk to" each other is sometimes not a luxury but a necessity. For example, if one database stores sales orders or invoices, imagine being able to press a hot-key from a customer's record to see that customer's transaction history or open invoices, then hot-key it right back to the same customer's record. Tom Marcellus showed how this can be done is his May 1994 article entitled, "Create a Fast Link Between Databases." I came up with a different approach I called *Hyperlink* that appeared a few months later in the September 1994 issue.

#6—DTFSPECS for Database Documentation

It is difficult enough to know every Spec and every field attribute in a database you created. Imagine if you were handed one that someone else created! This is where John Dow's DTFSPECS utility shines. It proved invaluable in helping me with the number of Y2K analyses I had to perform on a variety of databases. James Warren's review of what I consider to be the best Q&A utility appeared in the October 1995 issue.

#5—"If" Statements in Reports

There is no "If" statement available in Q&A's Report facilities. However, Gordon Meigs, one of the most knowledgeable, if not *the* most knowledgeable person on Q&A reports, would be quick to explain how to use Q&A's @Text function to simulate an "If" in a report. This Q&A report functionality is nicely explained along with many others in *The Quick Answer* Focus Series volume, *Q&A Reports*, authored by Gordon. This simple trick really adds another dimension to Q&A report design.

#4—ASCII Backups

This important concept is derived from two *Quick Answer* articles. I preach (to whoever will listen) that the best way to back up Q&A data is using its own built-in export-to-ASCII file feature. In the November 1999 issue, Cliff Sobin's QuickTip, "Backup Your Form Design Independently of Your Data." described how it is important to have an empty shell of your database design available in cases when the database structure is corrupted. Alec Mulvey pointed out the following month that "It's Curtains for QABACKUP" (the backup program that comes with Q&A for DOS) because of Y2K issues with that utility. Follow these through and what falls out is creating ASCII file versions of your data as backups.



@Shell, Batch Files, and the Working Directory



In Q&A 5.0 for DOS, you can use

@Shell to run a batch file that performs a series of tasks then returns to Q&A. Something you often need to do in a batch file is change directory using the cd command. If you call this batch file via @Shell, be sure you cd back to the Q&A working directory (for example, C:\QADOS50) before exiting the batch file. Otherwise, some Q&A functions like Print Preview may stop working.

Here's a sample batch file that returns to the Q&A working directory:

cd c:\myfiles copy myfile.txt newfile.txt cd c:\qados50

Erika Yoxall, hammer@apk.net



Set Your Network ID!

Q&A locks certain functions like Mass Update and Program Form if someone is using the database. When you try to use one of these

functions, you get a message saying "File in use by Erika." This, of course, is only if you have the Network ID set. Otherwise, the message says "File in use by network id not set," making you run all over your office shouting "Who's in the invoice database?"

Fortunately, it's easy to set your Network ID. From the Q&A for DOS Main Menu, choose Utilities/Set Global Options. Near the bottom of the screen is the space to type your Network ID (up to 20 characters). Press F10 to save. Have everyone who shares any databases do this and you will always know exactly who has your files open.

Erika Yoxall, hammer@apk.net

My 10 Favorites...cont'd from page 8

When catastrophe happens, importing the ASCII backup file into the empty Q&A database will get you back up and running fast.

#3—Q&A Events

There have been a number of Q&A Master Seminars and Q&A User Group Bashes over the last few years. These were gatherings of the Q&A user and developer communities held at various locations across the country. The purpose of these events was to share experiences and ideas with other Q&A users. I do not recall ever speaking to an attendee who felt the time at these events was not well spent. The Quick Answer was always there providing its resources to make these events a success.

#2—Q&A Can Do Most of What a Small Business **Needs for Data Management**

In every issue, there is the unspoken message that Q&A can do almost anything to meet virtually any data management need. And in many cases, it can do what is needed at a fraction of the cost compared to other data management tools such as the Microsoft Access/Word combination.

#1—Access (no pun intended) to the **Q&A Community**

In my opinion, by far the most significant contribution *The* Quick Answer has made to the Q&A community is simply its existence. The amount of Q&A know-how it has made available is enormous. And distribution of this know-how has gone far beyond its printed newsletter. There is a downloadable electronic edition of The Quick Answer, there are the Q&A Focus Series Volumes (all still available), The Quick Answer's Web site at www.quickanswer.com, and the many Q&A Masters Seminars that have been held. The Quick Answer has provided invaluable resources for people everywhere to make better use of a tool called Q&A that has far outlived what most people ever expected and is still going strong in tens if not hundreds of thousands of offices around the world today.

Tom Marcellus deserves a standing ovation for his incredible efforts in supporting Q&A—and those who use it— for the past 10 years.

Thank you Tom.

David Dvorin owns Phoenix Solutions in Neshanic Station, New Jersey, which specializes in tailoring off-the-shelf software for a broad range of business needs. David's first article appeared in the May 1991 issue. Since then, 77 Q&A tips and articles by him have appeared in The Quick Answer. 908-281-6272, david.dvorin@bms.com.

The Quick Answer June 2000 9



My 10 Best Tips for Q&A Users

ALEC MULVEY

Over the years as a Q&A developer and user, Alec has seen it all. Here are his recommendations



1. BACKUP! BACKUP!!! BACKUP!!!

- 2. Every database you design should include a field that uniquely identifies each record, even if it's just a sequential @Number without an initial purpose.
- 3. In every database, have fields that automatically store the date a record was added and when it was last updated. (You can use *If @Update...* programming in Q&A 4.0, and *If @Modified...* in Q&A 5.0).
- 4. If you're sharing databases on a network, have Q&A store its temporary files on each PC's local drive, not on the server. Many Q&A operations will run faster this way. If users share a copy of Q&A (rather than each user having his or her own copy), start Q&A using a –p personal path switch that points to the location of the user's own configuration file. Then use the Set Global Options screen to tell Q&A where to store its Temp files.
- 5. Run Recover and null Mass Updates (blank Retrieve and Update Specs) on your database(s) regularly to keep them in good health. If a database is shared on a network, pick a time when nobody will be using it, copy it to your local drive, run the Recover and Mass Update on it there, check to make sure it's okay, then copy it back up to the server.
- 6. Store all your databases in one subdirectory and make it Q&A's default database directory. (*Main menu / Utilities / Set Global Options* screen in Q&A for DOS).

- 7. In conjunction with #6 above, never use pathnames in your XLookup programming statements—specify just the database name. This way, if you move your databases or Q&A to a different drive or directory, you won't have to update all your XLookup programming.
- 8. Likewise, when recording macros that access databases, don't use pathnames. Instead, press Shift-F4 to clear the path that Q&A proposes, then type only the database name. (This assumes that your databases are stored in a default database directory as in #6 above.)
- 9. Create two "template" reports (one in portrait orientation, one in landscape) complete with any fonts you use, commonly-used fields and useful derived columns, headers and footers, and so forth. This way, when designing a new report, you can start by making a copy of one of the templates. You'll save time and your reports will have a more consistent appearance.
- 10.Don't let the quantity of reports proliferate—they add overhead to the database. Prefix each report name with a number ("09 Sales by Month, HP4") and put the report number in a small font in the report's footer. This way, anyone can pick up a printed copy of the report and readily see which report to print to get the same result, rather than create *yet another* new report from scratch. Regularly purge any un-numbered reports.

Alec Mulvey owns Keyword Training & Consultancy in Ascot, near London, England, and has been building Q&A applications and training clients for 10 years. Keyword Training is the UK distributor for the International English edition of Q&A and John Dow's Utilities. Fax +44-1344-884-111, alec@keywordtraining.com, www.keywordtraining.com.



Print Extra Copies of a Form or Report

Q&A for DOS doesn't give you a way to print *multiple copies* of a database record or report. But if

you're using an HP LaserJet or compatible printer, there's an easy workaround. At the Print Options screen, on the *Printer Control Codes* line, type ←&I#X (replace # with the number of copies to print), then press F10 to print. To type the ← (left arrow) character, press Alt-F10, then press and hold down the Alt key while

pressing 27 on the numeric keypad. For two copies, the printer code would be ←&I2X (with a lowercase "L" in front of the "2"). If you always print the same number of copies of a report, simply add the code to the report design. To print two copies of a database record, you could record an Alt-2 macro like this to invoke from the Form Print Options screen:

<begdef><alt2><name>"<caps,>alt2<caps.>"<vidon>
<dn><dn><dn><dn><dn><dn><dn><df10><esc>&12X<enddef>

10



My Favourite Quick Answer Articles

ALEC MULVEY

VER the years, *The Quick*Answer has been an incredibly valuable resource for me. I started subscribing in 1992 and immediately regretted not having acted on the subscription

offer that came in the box with the "new" Q&A 4.0 a year earlier. Here is a list of some of *The Quick Answer* articles I've found most useful. Many of these introduced techniques that I've used routinely ever since.

- 1. In the October 1992 issue, Robert Laudensack described a variety of report tips in his "Conditional Logic in Report columns" article. This introduced to me the vital concept of a "delayed" report column. He also introduced me to If-Then-Else logic with derived column expressions such as "#10=#20" and @Select.
- 2. In the November 1992 issue, Laurie Slatin taught me how to create a consistent part-numbering scheme by adding leading zeroes to the numbers with a statement such as #2=@Right("0000" + #1, 5).
- 3. In the January 1993 issue Robert Varner demonstrated how to eliminate column headings and their separator lines in reports.
- 4. My April 1993 issue is well annotated—especially Laurie Slatin's "Posting to Multi-line History records." It's a splendid example of using indirection in programming. Next to her final example I wrote, "This does the business!" as I had a use for it at that time!
- 5. Arguably the most useful technique I picked up early on is the @Text (conditional test, result-if-true) syntax in Q&A reports. I'm not sure where I first saw this particular "If-statements-in-reports" technique. It may have been in Gordon Meigs' "Identify near-duplicate Records" article in the May 1993 issue where he explains it and shows it to good advantage.
- 6. One of the most valuable functions served by *The Quick Answer* over its glorious 10-year history is to keep us informed about Q&A. One way Tom Marcellus has done this is to publish comprehensive reviews of new versions. He seems to sum it up just perfectly, even in the title. Both "Q&A for Windows—Yes, No and Maybe" (December 1993 by David Dvorin) and Tom's "Q&A 5.0 for DOS—A little Late, But Not too Little" (August 1995) are near-perfect. The 1995 article is a splendid primer on Q&A 5.0's new features.

- 7. If I had to choose the single most useful tip I picked up from *The Quick Answer* in the pre-Q&A 5.0 days, it would be creating pick-lists using Restrict Specs, and populating them with reports run by macros. This was all described by Tom in his article "Create a Picklist for Stock Items" in the October 1993 issue.
- 8. Tom showed off some remarkable Windows-like devices such as check boxes and control buttons for Q&A 5.0 in his January 1996 article, "Streamline tasks with Custom Windows-like Gadgets."
- 9. I've been contributing to The Quick Answer since 1994. I think my most important contribution is the unimaginatively-titled "All about Columnar Report Global Options" in the February 1996 issue.
- 10. The most useful technique I acquired during *The Quick Answer's* "middle years" was Bill Halpern's technique to string together a number of fields of, for example, sales-related data, and post them to a new line in the customer's record. This is all described in his "Create a Scrollable History Field" article in the April 1996 issue.
- 11. Another terrific article during these years was Gordon Meigs' "Mass Update and Batch Post in a Multiuser Environment" (September 1996). I remember reading this avidly, and using the technique at several clients. It involves creating an intermediate database using Import/Export and Post/Xpost to exchange data between two live databases to overcome the restrictions of methods that would otherwise require exclusive use of the database. The accompanying table listing which operations are "Single user/Locked File" or "Multi User/Shared File" is invaluable.
- 12. But there's plenty that's good in later issues. In the May 1999 issue, Tom not only shows how to use Q&A data in Microsoft Word mail merges ("The Easy Way to Mail Merge Your Q&A Data in MS Word for Windows," but in another article describes how to publish Q&A data on a web site, then goes on to show how to print Windows documents (such as a Word document or Excel spreadsheet) along with a Q&A mail merge. Remarkable!

Let's hope *The Quick Answer* is still providing useful tips and techniques on Q&A's successor 10 years from now!

With this issue, 62 tips and articles by Alec have appeared *The Quick Answer* since 1994.

The Quick Answer June 2000

A (Partly) Q&A Crossword Puzzle

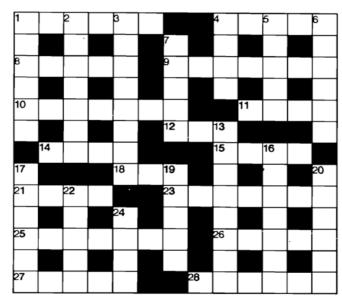
Across

Compiled by Alec Mulvey

- 1. Every macro starts with this (6)
- 4. Edible Stardust composer? (5)
- 8. No wig ruffled when in debt (5)
- 9. He knows a thing or two about Q&A (7)
- 10. Digital image acquisition peripheral (7)
- 11. You can't get a smaller file than one of these! (4)
- 12. The beginning of popular music (3)
- 14. Shift-F8 sets this mode (4)
- 15. Unit found in Winchester (4)
- 18. Text spoken at function? (3)
- 21. At the very top (4)
- 23. Learn HD corruption to be in charge (7)
- 25. Great country! (7)
- 26. You're likely to find plenty of these in ASCII export files (5)
- 27. Your first printer, perhaps? (5)
- 28. Past, present, future (6)

Down

- 1. Unrefined brew, so look through the database (6)
- 2. Acquire a master, academically? (4,1,2)
- 3. Is this the sort of manipulation that goes on where Symantec's tech support is? (8)
- 4. Never far away with the right key (4)
- 5. Wm will lead you to many such definitions (5)
- 6. Might be blue, but never close (6)
- 7. Cutting-edge peripherals? (5)



- 13. Precursor to 17 (8)
- 16. May be Greek; may be 17; may be in your report! (7)
- 17. What you'll find at 1927A Harbor Boulevard! (6)
- 19. Horn I upset at the zoo (5)
- 20. CS in the CS spec to suppress these (6)
- 22. If you can record a macro that does this, you're clever indeed! (5)
- 24. Starters on the Menu (4)

Answers next month



Visit *The Quick Answer's* Web Site at www.quickanswer.com

- Complete Back Issue Index 1990-to date
- Comprehensive Topic Index 1990-to date
- Info on Online Subscription Benefits

- Info on Q&A Year-2000 Issues
- Q&A Tips and Ideas
- Searchable Solutions Database
- Dozens of Free Files to Download
- Full Database Applications
- Q&A Consultants Directory
- Links to Useful Web Sites & More!

Find out about savings and benefits when you switch to the Online Edition



June 2000 Anniversary Issue