This free back issue of
THE QUICK ANSWER is provided courtesy of…

The Monthly Newsletter for Sesame Database Manager
http://www.insidesesame.com
Read a Free Issue of Inside Sesame!

AND

LANTICA
SOFTWARE LLC.

Makers of Sesame Database Manager
Compatible with Symantec Q&A™
http://www.lantica.com

Q&A Basics

An Introduction to Table View

ALEC MULVEY

WHEN *The Quick Answer's* editor suggested I write a Q&A Basics article on Table View, I was sceptical. "Who needs that?" I asked. But Tom soon convinced me that this is an area often overlooked or neglected by Q&A users, some of whom don't know that Table View even exists or are uncertain of how to take advantage of it.

What is Table View?

"Table View," "Datasheet View," "Spreadsheet View"—call it what you like—is a different view of your data than the usual default "Form View." In Form View you see only one record at a time: one customer, one inventory item, one sales order or what have you. If the form consists of more than one screen page, you can press **Page Down** to see the remaining fields. But you are still looking at the data for just *one* record.

Table View, on the other hand, allows you to view data from *multiple* records simultaneously. (See Figure 1.) You can see 17 records at a time as rows in the Table View, and five fields at a time as columns. You can press **Page Down** to see further records, and scroll across to see further fields. Think of it as a 5 x 17 window into the totality of your data, laid out in rows and columns.

To switch to Table View, you press **Alt-F6** from Form View. To switch back to Form View you move to a record and press **F10**. You're then on that same record—and in the same field—you were on in Table View. If you press **Esc** from Table View, you quit Search/Update mode and you're back at the Q&A File Menu. These are the basics, now let me expand on them.

Beyond the basics

When you go into Table View for the very first time, what will you see? Good question. This is what causes confusion amongst many.

Firstly, the rows. Suppose you perform a normal Form View Retrieve Spec search that returns 25 records—a "stack" of 25. If you press **Alt-F6** to switch to Table View from the first record in the stack, then it will be at the top of the table and you will see 16 records below it.

MONTH	YEAR	PAGE	TYPE ARTICLE	AUTHOR'S F/NAM
JAN	2001	02	TIP	Tom
JAN	2001	03	ART	Cliff
JAN	2001	06	HELP	Bill
JAN	2001	06	HELP	Bill
JAN	2001	06	HELP	Bill
JAN	2001	07	HELP	Bill
JAN	2001	07	HELP	Bill
JAN	2001	08	ART	Alec
JAN	2001	10	TIP	Alec
JAN	2001	11	TIP	Tom
FEB	2001	01	ART	Tom
FEB	2001	02	TIP	Alec
FEB	2001	02	TIP	Erika
FEB	2001	06	HELP	Bill
FEB	2001	06	HELP	Bill
FEB	2001	06	HELP	Bill
FEB	2001	06	HELP	Bill

QAINDEX.DTF   Retrieved record 1633 of 1750   Total records: 1750

Esc-Exit F1-Help (↓ ↑ → ← Home End PgUp PgDn)-Navigate   F10-Show form

Figure 1. Table View of TJ Shuflin's QAINDEX.dtf (Q&A 5.0 format)

If the current record is the fifth in the stack, then you will see records 1 through 17 in the table, as before, but the cursor will be on the fifth record (the fifth row).

If you are in the ninth or later record when you switch to Table

View, then that record will be in the *middle* of the Table View. In all cases, you can scroll up or down to view the other records.

Now, which fields do you get in Table View? Table View will *always* include the field you are in when you press **Alt-F6** from the form. The other columns will depend upon whether you have changed the layout of the Table View. (More on this later.) Taking the case of a fresh, uncustomised database, you will see the fields before and after

Quick Tip

Send Email from Any Database Record

You're looking at a client's database record. You have his email address in a field. You need to send him an email message right now. What's the easiest way to do it?

In many Windows programs as well as Web pages, you can click on a hyperlink containing an email address and your email program will automatically start. The recipient's email address will appear on the **To:** line, along with your own return address on the **From:** line.

Q&A 5.0 for DOS can do this just as handily. If you have Eudora email software (www.eudora.com), here's how.

Add a new selection to your External Programs menu. (From the Main Menu, select Utilities / External Programs.) On an empty *Menu Option* line, type something like "Send Email." On the corresponding *Command Line*, type:

```
e:\eudora\eudora mailto:%f
```

Your path to Eudora.exe will probably be different.

The **%f** parameter passes the value in the current field (in this case, EmailAaddress) to Eudora as a startup parameter.

For Outlook or Outlook Express, create a batch file named **mailto.bat** with the following line, and save it to your main Q&A program files directory:

```
Start mailto:%1
```

Have your External Program Command Line read this way:

```
mailto.bat %f
```

Now, in any database record, simply click in the **Email Address** field, press Alt-F9, and click *Send Email*. Your email program will start, and the **To:** and **From:** address lines will be prefilled, ready for you to add your subject and message. When you quit the program, you'll be returned to the same client's record in Q&A.

To create a Eudora- or Outlook-compatible email address book from the names and email addresses in your Q&A database, go to www.quickanswer.com and click on *Create a Eudora or Outlook Email Address Book in Q&A* on the Home page, under the "Hot Picks" heading.

—**Tom Marcellus**

Letters

New PCs and Expanded Memory Revisited

To avoid any Q&A 5.0 installation issues, I played it safe and had my new computer come with Windows 98. Alas, it's got the EMM (Expanded Memory Manager) problem. When I delete the NOEMS line from the config.sys file, I get an error message on bootup telling me that EMM is not installed.

The computer is a Compaq EVO 500 desktop, and, no, I didn't confirm before purchasing it that it supported Expanded Memory.

The back issue index at *The Quick Answer's* Web site indicated that the May and July 2000 issues of *The Quick Answer* might contain possible workarounds. The suggestions in *The Quick Answer* (May 2000, p. 12) fixed the problem. I added this line to my config.sys file, and all is okay:

```
Device=C:\Windows\Emm386.Exe RAM Frame=D000
```

I get the same warning messages on boot-up that were predicted in the articles, but it works fine. I did the memory check in DOS by running *mem/c/p* and it checks out fine.

Thanks again.   —Chris Cox

[You need Expanded Memory for Q&A 5.0. Be sure any computer you plan to purchase can physically support it. —Ed.]

the current field as columns to the left and right. You can easily scroll to these by pressing **Left/Right Arrow**, or **Tab/Shift-Tab**. The complication comes when you have customised your Table View—that's when you can get some surprises. I'll explain all this later.

Navigating Table View

Moving around in Table View is easy. The likely keys do what you would expect. You can, as always, press **F1** for context-sensitive help. And while on the Help screen you can press **Page Down** for a further screen of function keys.

Editing Data in Table View

I've been surprised over the years to find that some folks are not aware that they can edit data in Table View. I think this may be a carry-over from Q&A 3.0, where Table View was a fixed read-only view of your data. But take it from me, you certainly *can* change your data. Table View is especially useful—in fact *ideal*—for entering a "Y," for example, into a "Print This?" field, because you can whiz down the column typing a single-character entry into the same field in multiple records. I often do this for up to a few dozen records as it's quicker and more goof-proof than performing a Mass Update. It's amazing how quickly you can repeat **Y**, **Down Arrow** 50 times!

When you edit fields in Table View, you are initially in overtype mode. So if you type an "N" into a field that contains "Y" you get "N". If you type "N" into a field that contains "Text" you wind up with "Next." I say "at first" because it needn't stay that way. (See the sidebar.)

It can happen that the entry in a field is longer than the 15-character limit that can be displayed in the fixed width of the Table View columns. In this case, the first 14 characters are displayed, followed by an arrow. If you try to edit such a field, Q&A will tell you that you need to press **F6** to open the Field Editor, which behaves just as it does in Form View.

Customising Table View

By default, Table View shows you all the fields in the database in their natural top-left-to-bottom-right Form View order. You can change that, however—and you can even create and save different layouts.

To change the column layout ("Define Table View"), press **Shift-F6** from *either* Form View or Table View. This displays a regular Q&A "Spec" screen (a copy of the database form, regular colour, same as all the others). If you have never modified this default Table View Spec, you will see a number in each field. There will be a "10" in the first field, a "20" in second field, and so on. These numbers specify the order the fields appear in the table columns.

TIP—If your database form design is finalised, be sure to

Updating Records Easily

Every so often when working with software, you discover something so useful that you say to yourself, "If only I'd known this years ago." So it was when I found out that I could press **F5** to edit a field in Table View. Before that, I thought you needed to replace the whole field entry. So I would re-type entries rather than edit them. Now I simply press **F5**. When I do so, I get a cursor in the field. I can move back and forth with the arrow keys, use insert mode, press End to go to the end of the field, press **Ctrl-Left/Right** to move one word at a time, and so forth. Bliss!

save this original Table View Spec. Press **Shift-F8** and give it a name such as "All fields, natural order" or something similar. If you like, you can then clear the entire Spec (press **F3**) and start creating your own custom Table View layouts, yet still return to "The Full Monty" when you like.

You can change your numbering (field order) scheme at any time. Each numbered field will be shown in Table View *plus* the field containing the cursor when you press **F10** to apply the Table View layout. It is this last fact which causes so much confusion. Users don't notice which field they happen to be in when they press **F10**. That, and the fact that sometimes they have to scroll left or right to see their fields in Table View is what disorientates them.

While in the Define Table View Spec you can press **Shift-F8** to save a Table View layout, or press **Alt F8** to see a list of saved Table View layouts. This way you can build up a library of different task-related views of your data and call them up by name.

TIP—You can use Table View as a way of navigating a long complex form. Suppose there are 200 or more fields on a 10-page form, and for a particular task you need to move between a few of these fields. Define a Table View with these fields. When you want to go the one buried in the middle of page 6, tab into that column and press F10—you'll be in that field in Form View!

TIP—You might like to create a macro to open your database using a saved Retrieve Spec, a saved Sort Spec and a custom Table View layout. You could create several such macros and put them on a Custom Menu (or Q&A's Main Menu as alternate programs).

A question I have often been asked is "Why can't I seem to make my chosen Table View layout the default Table View?" Well, you probably are, but subject to that rule that says that you get the current field as well. This might be the left-most column or on the right, depending on whether it is before or after the defined fields.

Furthermore, it might force defined fields off the initial view. Lastly, the "extra" current field is ignored the next time you go into Table View. This all adds to the confusion. But actually Q&A is being quite logical. If you still insist that Q&A is not "following orders," then try this: after defining your Table View and applying it, don't press **Esc** to exit Table View—press **Shift**-**F10** instead. I can't say for sure that it will do more to "cement" your default, but I have never known it to fail.

Keeping the "key" field in view

One final tip before we leave this topic of defining a Table View layout. Often, five columns are not enough. You might have a real need to see seven or eight fields, and although you'd ideally like to see them all at the same time, you would be content with seeing five at a time and panning left or right to bring the others into view. The problem is that you then can't see the "key" column—the column with the part number, the person's name, or whatever—that identifies each record. The solution takes a bit of lateral thinking. Don't make the "key" column the left-most— make it the fifth column. That way, you can see four columns plus the "key" column first, then pan across and see four different columns plus the key column. (See Figures 2 and 3.) You could even have a pair of macros to "switch views" for you!

Programming execution in Table View

Programming can be a potential minefield in Table View. Some programming works and other programming doesn't. Some things work only under certain conditions.

Here's an example. Say you have a field restriction list that pops up a picklist on pressing **Alt**-**F7** in a field. (An example of this is the **Month** field in QAINDEX.DTF (*The Quick Answer* Index database available for download at qaug.com in Q&A 4.0 format and also from the Free Downloads page at www.quickanswer.com in Q&A 5.0 format.) In Table View, the list won't display when you press **Alt**-**F7** in that field—unless you *first* press **F5** to edit that or any other field in that record. On-field-entry programming won't work unless you first press **F5**.

This is a "basics" article, so I can't go into all the complexities of what works when. It would take too long to compile such a list and, frankly, at this stage in Q&A's history with *Sesame* just around the corner, it's probably not worth it.

How will this change in *Sesame*?

For all its faults (in my view), *Q&A for Windows* has much more advanced table view capabilities than Q&A for DOS. Called "Spreadsheet" view in that product (Records / View as Spreadsheet), it lets you see, on average, twice as many records and fields as its DOS counterpart. Plus, you can resize column widths and add records to the database without having to return to Form View.

Sesame's table view is even better. (See the *Sesame Seeds* article in on page 9 in this issue.) As well as being able to view any fields you want in sizeable columns, you can drag columns left and right to re-order them, and optionally sort on any column just by clicking on an icon in the column heading. Click once for an ascending sort, click again for a descending sort. It's everything you could want in a table view.

Conclusion

Despite its few idiosyncrasies, Table View can be very useful. Now that you see what you can do with it, you might like to start using fields for specifying records to be printed and the like, and fill them in using Table View. Speaking of which, it reminds me of an on-going challenge I've had—something I've attempted to get to work in Q&A 5.0 on several occasions. That is, to be able to click with a mouse in a field in Table View and have Q&A enter a "Y" in that field without my having to press a key and without having to activate a macro by other means such as clicking the centre mouse button. Oh, and I need to be able to reverse this as well— to be able to click on a "Y" and clear the field. If you can get this to work, you're a better person than I am! (Tom will hate me for saying this, but I have issued this challenge to him on several occasions. He's feigned disinterest, but I *know* he's tried!)

MONTH	YEAR	TYPE ARTICLE	PAGE	AUTHOR (FULL N
SEP	1999	ART	08	Tom Marcellus
OCT	1999	ART	01	John Dow
OCT	1999	TIP	02	Tom Marcellus
OCT	1999	TIP	02	Alec Mulvey
OCT	1999	TIP	02	Tom Marcellus
OCT	1999	HELP	06	Gordon Meigs
OCT	1999	HELP	06	Bill Halpern
OCT	1999	HELP	07	Gordon Meigs
OCT	1999	HELP	07	Bill Halpern
NOU	1999	TIP	02	Alec Mulvey
OCT	1999	HELP	07	Gordon Meigs
OCT	1999	ART	08	Tom Marcellus
NOU	1999	ART	01	Cliff Sobin
NOU	1999	LTR	02	Mike Bell
NOU	1999	TIP	04	Cliff Sobin
NOU	1999	ART	05	Erika Yoxall
NOU	1999	HELP	06	Bill Halpern

Figure 2. The left-hand view (columns 1-5).

AUTHOR (FULL NA	MAJOR TOPIC	KEYWORDS	DOS	WIN
Tom Marcellus	Processing Tex→	Text; File; Re→		
John Dow	Programming fo→	Programming; I→	X	X
Tom Marcellus	Quick Delete D→	Delete; Update→	X	
Alec Mulvey	Indenting Seco→	Indent; Second→	X	
Tom Marcellus	Play Sound Fil→	Play; Sound; F→		
Gordon Meigs	Y2K - One More→	Y2K; 2000; Yea→	X	
Bill Halpern	Windows NT Net→	Windows; NT; N→	X	
Gordon Meigs	Q&A Databases →	Database; CD; →	X	X
Bill Halpern	Can a RAM Disk→	RAM; Disk; Tem→	X	
Alec Mulvey	Y2K Date Forma→	Y2K; Year 2000→	X	
Gordon Meigs	Problems After→	Printer; Probl→	X	
Tom Marcellus	Q&A 'Time Cloc→	Time Clock; Tr→		
Cliff Sobin	Have a Window →	Userselect; @X→		
Mike Bell	Line Draw Char→	Acrobat; PDF; →	X	
Cliff Sobin	Backup Your Fo→	Backup; Data; →	X	
Erika Yoxall	How Program an→	Linked; Lists;→		
Bill Halpern	Remote Access →	Server; Remote→	X	

Figure 3. And the right hand view (columns 5-9).

Doing the Math

JON MCLAUGHLIN

WITH a little programming, Q&A can be made to do some pretty awesome things, including many fairly advanced math calculations. But Q&A isn't a math program. It won't, for example, calculate the result of addition or multiplication to more than 15 digits. Similarly, it will only calculate division or the square root of a number to 15 decimals.

If you've got the time and interest, you can often do better than Q&A in this regard. With simple paper and pencil and basic math skills, you can solve problems with results way beyond 15 digits.

Here's an example of a basic math calculation most anyone can do by hand:

```
2568
x 32
----
```

The initial steps to solve it are:

1. Multiply 8 x 2 (which equals 16).

2. Write down the number 6.

3. Write down the number 1 as a "carry over."

The next step would include these four smaller steps:

4. Multiply 6 x 2 (which equals 12).

5. Add the 1 carried over from step 3 (which gives you 13).

6. Write the number 3 to the left of the number 6.

7. Write the number 1 as a carry over.

Working from right to left, you'd continue this way until all the numbers in the top row (2568) are multiplied by the number 2 of the bottom row. Next, you'd begin multiplying all the numbers in the top row by the number 3 of the bottom row, until you get this:

```
2568
x  32
-----
 5136
77040
```

Finally, you'd add 5136 to 77040. This addition is also done in steps, from right to left, carrying any remainders.

My question was—could I program Q&A to do these kinds of simple math steps with huge numbers, and string together the results? Okay, maybe I've got too much time to burn, but it was a programming challenge I knew I could conquer. Inspired, I set out to program Q&A to calculate the square root of a number to way beyond 15 decimal points. (Sqroot3.dtf, a Q&A 4.0 database, is included in this month's download file.)

It's all in the programming

First of all, just like Q&A is not a math program, I am not a mathematician, so I had to establish some limits. My programming is limited to integers less than 1,000,001.

The programming first establishes the integer part of the solution using a "trial and error" method of multiplying integers by themselves, from larger to smaller numbers. It then begins to add decimal points, one at a time, in a similar trial and error method, testing decimals in descending order until the correct decimal point is found.

Below is the programming in full, followed by some explanatory remarks:

```
SQ ROOT OF: >#1: if #1="" then goto #1; if @int(#1)<>#1
    then {#1="Must be an integer"; goto #1};
    if #1 > 1000000 then
    {#1="Must be less than 1,000,001";
    goto #1};
    goto #98

to: >#98: if #1<>"" then
    {clear(#99,#4,#9,#10,#11,#14,#53,#55,#50,#51,#52,
    #57,#58,#59,#60);
    start="calculating...";
    #9=1100;#10=101;goto #9}
    else goto #1

EQUALS: #99

2: <#2: #14=""; #52=10; #57=0; goto #3

3: <#3: #52=#52-1; #5=@str(#4)+@str(#52); #6=#5; goto #4

4: <#4: if @left(@right(#5,5),1)="0" then
    #58= 1 else  #58= 5;
    #53=@tn(@right(#5,#58))*@tn(@right(#6,5))+#54;
    #12=@str(@right(#53,#58))+@str(#12);
    #54=@str(@left(#53,@len(#53)-#58));
    #5= @str(@left(#5,@len(#5)-#58));
    if #5=""then{#12=@str(#54)+@str(#12);
    #54=""; goto#5}
    else goto #4

5: <#5: if @left(@right(#12,10),1)="0"
    or @left(@right(#13,10),1)="0" then
    #59=1
    else #59= 10;
```

Print Q&A Win Forms Sans Field Labels

I use Q&A 4.0 for Windows and I need to print my forms without the field names/labels, just as I was able to do in Q&A for DOS. In Q&A for DOS you have the option of printing the field names along with the data. I'd like to continue to use my pre-printed forms and print only the data to fill them. I hope I can do this in Q&A for Windows!

—Bob

You can—and here's how. In general, printing in Q&A for Windows is very different from printing in Q&A for DOS. In Q&A for Windows, you are actually printing an image of the form and you cannot select, at that point, what parts of the image to print. However, it's easy to create a new form without field labels, and save it as "no label form" or something like that. You do this by selecting *Design Input Forms* from the Select menu. Starting with your current form, click on each label, press Delete, and then save the resulting form to a new name. Then, when you have the record you want to print on-screen, simply click on the *Forms* dropdown, select the new form and print that. A workaround, yes, but a relatively simply one.

Q&A Window Sizing in 2000/XP

I run Q&A 4.0 for DOS on my Windows 2000 desktop. Even though I've clicked on Properties and resized my Q&A window, this doesn't seem to affect Q&A's screen size when I run it. What's the trick to resizing my Q&A window?

—Andy

Windows 2000 and XP have a very non-intuitive interface when it comes to changing window sizes. Here's how to do it. The exact or optimum settings will depend on your monitor's size and the display resolution you're using:

1. Start Q&A from your desktop shortcut.

2. Click on the little *C:* black icon in the extreme upper right-hand corner of the Window. A menu will drop down and one of the choices will be *Properties.* Click on this.

3. Click on the *Font* Tab.

4. Make sure that *Lucida Console* (not "Raster Fonts") is selected in the middle window.

5. Select a size between 20 and 28 (again, it will depend on your screen resolution) and click OK.

6. A new Windows dialog will ask you whether you want to "Apply Properties to Current Window Only" or "Save Properties for Future Windows with the same title." Select the latter and click OK.

Your Q&A window will now be resized. If it is too big or small, simply repeat steps 2 through 6 until you get it the way you want it. Q&A will start that way from then on.

More on Windows XP Screen Problems

In the January 2002 issue I answered a question on Q&A for DOS and Windows XP in which Q&A displayed okay but the bottom half of the screen was nothing but black. I described a workaround that did the trick on most PCs. More research (yes, we do have to be diligent) indicates that the problem lies in the way XP sets up the Q&A window on *some* machines. The issue seems to be that it makes the window larger than what will be displayed inside it. The solution is found in the same place as the previous problem.

1. Start Q&A from its desktop shortcut.

2. Click on the little *C:* black icon in the extreme upper right hand corner of the Window. A menu will drop down and one of the choices will be *Properties.* Click on this.

3. Click on the *Layout* Tab.

4. Make sure that the "Screen Buffer Size" and the "Windows Size" are both set to 80 Width and 25 Height.

5. Click OK. A new screen will open asking whether you want to "Apply Properties to Current Window Only" or "Save Properties for Future Windows with the same title." Select "Save Properties for Future Windows…" and click OK

Your black space in the window should be gone.

Q&A for Windows Not Running in Europe #1

I've been trying to run Q&A for Windows, which I just purchased. But it won't start on my Windows 98 SE computer. I used Q&A for DOS for many years but needed the printing capabilities of the Windows version. What happens is that I get an error message that QA.EXE has caused an error in Windows and will be shut down. Is there any way to fix this problem?

—Jan

This is a little-known problem that has to do with a bug in Q&A for Windows and the regional settings on your computer. It seems that Q&A for Windows will not run on a system where the Windows display settings for negative currency values are set to display with the minus sign at the end (*$100.00-*). This is the standard setting for Windows PCs in the Netherlands and perhaps other European countries as well. In Windows 98, you will get the message you are seeing. In Windows 2000 or XP, Q&A will briefly flash and close instantly.

But we have the fix! In the WIN.INI file in Windows 98 there's a setting that determines how negative currency numbers are displayed. In the English-speaking world the default is "0" or "2." Zero displays *($100)*, 2 displays -*$100*. In the Netherlands this default setting is 11. Eleven displays *$100-*. Believe it or not, a setting 11 stops Q&A for Windows from loading. You get a GPF error. Changing it to 0 or 2 then rebooting resolves the problem.

The value in question in WIN.INI is *iNegCurr* (*sic*). You can set it to 0 or 2 by editing the file or by following these instructions:

In Windows XP this value is in the Control Panel under Regional and Language Options / Regional Options / Customize / Currency / Negative Currency Format. You pick the *($100)* or *-$100* option for negative currency (first or second option in the dropdown list).

In Windows 2000 and Windows 98 this value is in the Control Panel under Regional Options / Currency. You pick the *($100)* or *-$100* option for negative currency (the first or second option in the dropdown list).

If you use the Control Panel method, Q&A should run as soon as you say OK to the settings change. If you edit the WIN.INI file, you'll have to reboot your machine.

Q&A for Windows Not Running in Europe #2

I've used Q&A 4.0 for Windows for years on a daily basis. Recently, I installed Windows XP and now Q&A for Windows won't run. What can I do about this?

—Loek

There are actually three issues here. The first is the one I addressed in the previous question. The second is that Q&A for Windows will not run in any NT-based operating system (Windows NT, Windows 2000 or Windows XP) unless you apply the NT patch available from John Dow (www.johntdow.com). The third issue is that the patch will only work on Q&A for Windows 4.01, not on version 4.0 (which was distributed widely in Europe). If your executable file, QA.EXE, is dated *3 November 1993 at 4:01AM* (indicating that you are running Q&A 4.01) then the patch should correct the problem. If not, you need to get a replacement CD from PCTA (www.pcta-usa.com). If you handle all of these points, Q&A for Windows will run fine in Windows XP in the Netherlands.

Q&A for Windows Field Spacing on Labels

For many years we used Q&A for DOS. The transition to Q&A for Windows has had its frustrations. For example, we are having difficulty designing and printing merged mailing labels. The first name and last name fields print very far apart. To give an example, *Bill Halpern* prints this way:

```
Bill          Halpern
```

Moreover, some of the records in our database include "Firm" or company names while some don't. When we print labels, Q&A for Windows prints those without a firm name as a blank line, like this:

```
Bill          Halpern

1234 Anywhere St.
Los Angeles, CA 90033
```

This looks very unprofessional. How can we correct it?

—Russell

Correcting for this problem in Q&A for Windows is easy but a little obscure. (Q&A for DOS takes care of it pretty much automatically). Open your label design and select the last name field by clicking on it. Then select *Arrange* from the menu and click on *Slide objects.* Place a check mark in the *Slide Left* block. Next, select all the fields from company on down and repeat the procedure, this time clicking on the *Slide Up to Fill* and the *All Above* blocks, as well as the *Slide Left* block. Save your label design and your labels should now print looking just as you want them.

Importing ASCII Files Into Q&A Databases

I need to import Standard ASCII records (which I can view in Q&A Write for DOS) into an existing database that already contains records. Here's the scenario: When we receive a shipment of goods, I update our Inventory database with the invoice numbers, dates, costs, etc. of the goods, but I

Put Your Q&A Data On Your Web Site, Part 2

TOM MARCELLUS

In this series, we look at five different ways to get the data out of your databases and onto the World Wide Web where anyone anywhere can access it.

IN this five-part series we're looking at various methods or techniques you can use to get your Q&A data on a Web site. The method you choose depends on the kind of output you need from Q&A. The Q&A output you need depends on the kind of Web page you want to create or update.

Here, in a nutshell, are the five methods:

1. Turning individual Q&A database records into individual ready-made Web pages that you can add to your Web site.

2. Formatting Q&A documents as ready-made Web pages that you can put on your Web site.

3. Designing Q&A reports with HTML-formatted output that display your data in attractive, easy-to-read tables or spreadsheet-like formats on a Web site.

4. Exporting then uploading your data to your Web server in plain ASCII files that can be parsed (divided up) by programming on the server and displayed in informative tables.

5. Placing actual Q&A databases on your Web server with the ability to select (via a browser) which records and fields you want to see, and have the results displayed in tables, records, reports or other formats.

Last month in Part 1 (which you should read before proceeding with this installment) I covered method #1, a technique that automatically generates an individual Web page for any record in a database. That is, you pull up a Q&A database record, answer "Yes" to a prompt, and programming in the database outputs the record's data to a Web-ready HTML file you can immediately upload to your Web server and make available to anyone who visits your Web site. This method is most suitable for, say, high-ticket products where you might want a separate Web page for each product.

This month I'll cover method #3, designing Q&A reports that automatically output HTML-formatted Web pages. This method, instead of giving you one Web page per database record, yields a Web page that includes, at your discretion, data from selected or all the records in a database. The output format will be what's commonly called an "HTML table"—a grid or spreadsheet-like format that displays your data in rows and columns. (See Figure 1.) Whenever you want to update the data on your Web site, you simply run your Q&A report and upload the resulting output file to your Web server, replacing the old file of the same name.

A sample database

For the sake of illustration, let's say you want to generate a price list of your products and make it available on your Web site for your customers. Your prices might be subject to frequent change for various reasons, you may routinely add new products to your product line, or you might simply want to keep your customers apprised of available on-hand quantities on a daily basis. This information is kept constantly up to date in your database, and you'd rather not have to deal with a *separate* document or application to publish your updated price list—after all, that's why you use a database in the first place.

Just like you might run a report to generate a current price list that you would then photocopy and fax or mail to your customers in some manner, this method will generate the same price list but in a form where you can

Stuff Inc. Price List
Price Update January 23, 2002 — Home

Stock No.	Description	Price Ea.	10+ Price Ea.	On Hand	Order It!
P54-XX	Cabinet 36 inch	$67.22	$63.86	88	Order
P55-XX	Cabinet 60 inch	$89.55	$85.07	456	Order
D55-X4	Darts 6 pc set	$23.55	$22.37	21	Order
57-X445T	Desk Chair Exec	$79.55	$75.57	87	Order
XR-2344T	Desk Chair Green	$66.22	$62.91	32	Order
R-44-U	Goggles Protective	$12.55	$11.92	122	Order
X22-45	Handy Wipes	$9.95	$9.45	323	Order
BR-12C	Overalls Large	$29.34	$27.87	45	Order

Figure 1. You can create attractive and informative Web pages like this using nothing more than Q&A.

"publish" one copy to your Web site so that *all* your customers can instantly have the updated information available to them. It will take you five minutes instead of five hours to broadly circulate your updated prices.

A sample database

Again, for the sake of illustration, let's say your report or price list will include four fields from a database —**Stock Number** (Text), **Description** (Text), **Price Each** (Money) and **On Hand** (Number)—along with two Derived Columns—**10+ Price Each** and **Order**. The **10+ Price Each** column is simply a 5% per unit discount price for 10 or more of the item ordered, that will be calculated by the report. We'll design the report so that each entry in the **Stock Number** and **Order** columns will be hyperlinked. That is, customers viewing your price list can optionally click on any **Stock Number** to go to a page with more detail about that item, or they can click on **Order** to go to an order form where they can order that item online.

I won't get into designing Web order forms. This isn't the place for that. But I will show you some nifty capabilities (for an aging DOS program) and useful tricks you will want to know about when using Q&A reports to generate HTML tables for Web pages.

The download file for this month's issue contains a bare-bones Q&A 4.0 database with a built-in report that generates a simple HTML table (HTML4.DTF), but the database I'll illustrate here (also included in the download file—HTML.DTF) is a Q&A 5.0 database. Q&A 5.0 has two features useful for our purposes here that Q&A 4.0 doesn't have —(1) programmable Report headers and footers and (2) support for long Report Derived Column formulas (which Q&A for Windows supports as well). If you're serious about using Q&A to format your Q&A data for publication on a Web site, then I advise you to make the investment in Q&A 5.0. Some of the advantages 5.0 has over 4.0 *and* Q&A for Windows in this regard were amply shown in last month's Part 1 as well.

Installing a printer that prints to FILE

First things first. Any Q&A report you design to output HTML will have to be printed to a file. But because you'll need to include headers and a footer in that file (as you'll see), you can't simply print DISK, which strips them out. You have to print to FILE instead of to DISK. To print to FILE, you'll need to install a printer in Q&A (Utilities / Install Printer) that does so. (For Q&A for Windows, you can install a *Generic/Text Only* printer in Windows, set it to print to FILE, then select it for these kinds of tasks.)

For our this applicaation, you do not want to print to FILE using a laser, inkjet, or any specifc printer's driver, as you'll wind up with printer control codes in the file. You need to install and print to Q&A's *Basic (Vanilla) Non-laser Printer*, setting the *Port* to FILE. You can install this as your *Printer E* or whatever. When you're at the Print Options screen for the report and highlight the correct printer, the white line at the bottom of your screen should say:

```
Basic (Vanilla) Non-laser Printer NG »» FILE
```

This way, when you press F10 to print the report and select that printer, Q&A will prompt you for a filename to print it to. Be sure to give the file an **.htm** filename extension as this tells a Web server that it's an HTML file. Some Unix/Linux Web servers require the full **.html** filename extension. You'll have to work out your own salvation if your Web site is hosted on one of these. You'll probably just print from Q&A to a file with an .htm extension, then rename the file with an .html extension in Windows.

Designing the report

Let's get down to it. Here's the Column/Sort Spec for our sample report, appropriately named *HTML Formatted Report*:

```
Stock Number: 1,I
 Description: 2,AS,I
       Price: 3,I
     On Hand: 4,I
```

Here, we're sorting on the **Description** field so that the item descriptions will appear in the Web page in ascending alphabetical order, making it easier for visitors to your site to find what they're looking for. All the columns are invisible because the data in them needs to be formatted in the appropriate HTML tags to make the report a valid Web page. To do that, we'll use Derived Columns. (Press F8 from the Column/Sort Spec to reach the Derived Columns Spec.)

Following are the 12 Derived Columns, each one with a brief explanation. Of course it takes some time to design a report like this. Just keep in mind that you only have to do it once. Thereafter, all you'll have to do is run the report to get an up-to-date price list you can publish to your Web site in a flash.

```
Heading: Stock Number
Formula No. 1  "<tr><td>" + "<A HREF='" + #1 +
               ".htm'>" + #1 + "</a></td>"
Column/Sort Spec: 5,I
```

This column starts a new table row ("<tr>") and table data cell ("<td>") and places the **Stock Number** inside an "<A HREF...>" command, which hyperlinks the value to a Web page named with the Stock Number plus the *.htm* filename extension. The column is invisible, so its data doesn't immediately print. It'll be printed along with all the other data by a later Derived Column. If you need more space when typing a formula, press F6.

```
Heading: Description
Formula No. 2  "<td>" + @Str(#2) + "</td>"
Column/Sort Spec: 10,I
```

This invisible column will fill the second table data cell (still in the first table row) with the product's **Description**.

```
Heading: Price Each
Formula No. 3  @Str(@Tn(#3 + 0.001))
Column/Sort Spec: 14,I,F(M)
```

This column begins the formatting of the **Price** field. We've got a Money field here that has to be converted to a text value since we'll be concatenating it with other text information in subsequent columns.

Remember that a Money field is mainly a "display" format. If you type "89" in a Money field, Q&A will display "$89.00" but will store the value as "89" without the decimal or cents. Similarly, a value that displays in a Money field as $35.10 is actually stored as 35.1 without the trailing zero. The formula in this column, when coupled with the formula in the next column, will make all money values display in proper recognizable money format, complete with the leading "$" sign.

```
Heading: Price Each Formatted
Formula No. 4  "<td align='right'>" + "$" +
               @Left(#14, @Len(#14) -1) + "</td>"
Column/Sort Spec: 15,I,F(M)
```

This column completes the formatting of the **Price** value, sets it to appear in the next table data cell, and right-aligns that cell as is normally appropriate for money values that look best when aligned on their decimal points.

```
Heading: 10+ Price Each
Formula No. 5  @Str(@Rnd(#3 * .95, 2) + 0.001)
Column/Sort Spec: 19,I,F(M)
```

Here starts the calculation for the 5% discount field for 10 or more of the same item ordered. You use the same "formatting" technique for this money value as you do for the unit price value in the previous two columns.

```
Heading: 10+ Price Each Formatted
Formula No. 6  "<td align='right'>" + "$" +
               @Left(#19, @Len(#19) -1) + "</td>"
Column/Sort Spec: 20,I,F(M)
```

The fourth table data column is generated by this formula, which completes the formatting of the **10+ Price Each** money value, and right-aligns the cell.

```
Heading: Qty On Hand
Formula No. 7  "<td align='center'>" + @Str(#4) +
               "</td>"
Column/Sort Spec: 25,I
```

This is the fifth table data column for the quantity on hand. The **On Hand** field will contain a number, so you have to enclose it in the @Str function or Q&A won't concatenate (combine) it with the surrounding text. This is always the case when combining text with Date, Money or Number values.

```
Heading: Order This
Formula No. 8  "<td align='center'>" +
               "<A HREF='order.htm?stockno=" + #1 +
               "'>Order</a></td></tr>"
Column/Sort Spec: 30,I
```

This Derived Column represents the sixth and final table column. (Notice the closing table row tag ("</tr>"). This column will always contain the hyperlinked text, Order. But look closely at the formula. The target of the hyperlink is a page named *order.htm* (ostensibly the online order form page), followed by a question mark (?), the word *stockno*, an equals sign ("="), then the value in Derived Column #1. The value in column #1 is the **Stock Number** of the current row. When you follow a Web page filename with something like *?stockno=BR-2334-12*, you have what in Web jargon is called a *query string*. Programming in the target Web page (in this case, order.htm) can pick up this query string and do something with it, such as realize that an order is being placed for stock number BR-2334-12 and take the appropriate steps to find out how many are being ordered, who is doing the ordering, and so forth. I'll leave it at that.

```
Heading: \
Formula No. 9  #5 + #10 + #15 + #20 + #25 + #30
Column/Sort Spec: 35,HS(\ )
```

Every column up to this one is invisible. Now you're actually outputting (printing) the table row. Notice the backslash ("\") on the *Heading* line and the backslash-space in the HS command on the *Column/Sort Spec* line. These prevent a column heading and its separator line from printing for this column.

```
Heading: HTML Formatting String
Formula No. 10 "<html><head></head><body><p><font
               size='5'><b>Stuff Inc.</b> Price
               List</font><br>"
Column/Sort Spec: 40,I
```

Now we're getting into the hot-dogging final three Derived Columns—all of which, once again, are invisible. This 10th Derived Column will be picked up by Q&A as the *first* of three Report header lines. See the discussion below on the Define Page screen's header lines for how this works. This initial header will generate the HTML code that starts the Web page and prints the company name along with "Price List" in a large font size (*size='5'*). See Figure 1.

If you're a stickler for HTML formatting, you can add an *@Chr(13) + @Chr(10)* string wherever you want a line break in your HTML. To save space, you can define an invisible Derived Column with *@Chr(13) + @Chr(10)* as the formula, and simply reference that earlier column number wherever you want a line break in your HTML.

```
Heading: HTML Formatting String
Formula No. 11 "<b>Price Update " +  @Month$(@Date)
               + " " + @Str(@Dom(@Date)) + ", " +
               @Str(@Year(@Date)) + "</b>" +
               @Text(20, " ") +
               "<A HREF='home.htm'>Home</a></p>"
Column/Sort Spec: 45,I
```

This 11th Derived Column will be picked up by Q&A as the *second* Report header line. It prints the text, "Price

Update," in boldface, followed by the date the report was printed, then follows that with 20 spaces and a hyperlink to the Home page of the Web site (in this case, *home.htm*). In HTML, strings of spaces are ignored, so you must use the special * * code to tell the browser to make it a hard, non-breaking space.

```
Heading: HTML Formatting String
Formula No. 12 "<table align='center' border='1'
                cellpadding='4'><tr><td><b>Stock
                No.</td><td><b>Description</td>
                <td><b>Price Ea.</td><td><b>10+
                Price Ea.</td><td><b>On Hand</td>
                <td><b>Order It!</td></tr>"
Column/Sort Spec: 50,I
```

This final 12th Derived Column is picked up by Q&A as the *third* and final Report header line. It prints the beginning table formatting tags along with the table column headings in boldface. The *align='center'* command positions the table horizontally in the center of the page.

The Define Page screen
At the Report's Define Page screen (press F8 from the Print Options screen), make the following settings:

```
Page width.: 240        Page length..: 120
Left margin: 0          Right margin.: 240
Top margin.: 3          Bottom margin: 3
```

Important: You have to set your *Page Length* to a value that's a few lines greater than the number of products that will be included in the report. In other words, if you have 130 items on your price list, set your *Page Length* to 140 or so. If you set it too low, you'll get an unwanted page break in the output file that'll gum up the works.

While at the Define Page screen, add the following programming codes (shown in boldface) to the three Report header lines:

```
————————————— HEADER —————————————
1: *Pg {?10}*
2: *Pg {?11}*
3: *Pg {?12}*
```

These codes (those are French braces, not parentheses) tell Q&A to print the output of Derived Column No. 10 on the first header line, Derived Column No. 11 on the second header line, and Derived Column No. 12 on the third header line. Look at the Formulas for these three Derived Columns above and you'll see what they'll print. Check Figure 1 again, and you'll see that they correspond to everything from the top of the Web page down through the table's column headings.

Finally, on the first Report *Footer* line at the Define Page screen, type this:

```
</table></body></html>
```

These HTLM tags are the final bits of text to print in the report. They signify the end of the table, the body of

the page, and the HTML file itself.

You're done. Run the report, print it to FILE to your *Basic Vanilla* printer with an *.htm* filename extension, and view it in your browser. (Type the usual DOS path to the file in your browser's URL or address box.) If you got everything right, you'll have yourself a not-too-shabby little Web page price list, sprinkled with useful hyperlinks.

With the page displayed, you can right-click on it and select *View Source* (Internet Explorer) to marvel at your HTML.

If you need to add other elements to your Q&A-generated Web page—an image, for example—there's no reason why you can't place the HTML tag for it at the appropriate spot in a Derived Column formula. HTML does not contain the image files themselves, just the paths to them along with a few other details.

For example, if you wanted to place an image named *logo.gif* stored in the Web's *images* folder, the HTML tag would look something like this:

```
<img src="images/logo.gif" width="120"
height="60">
```

Remember that you can use single quote marks in HTML instead of the double quote marks shown in the example above—for all practical purposes, they mean and do the same thing. Using single quotes in your HTML makes it possible to enclose anything in double quotes that Q&A requires to be in double quotes, thus simplifying your programming. In other words, you can write your programming or formula this way:

```
"<img src='images/logo.gif'..."
```

rather than having to do it this more convoluted way:

```
"<img src=" + @Chr(34) + "images/logo.gif" +
@Chr(34) + "..."
```

Closing remarks
Day after day you enter, update, view and track your data in Q&A. When you need that data elsewhere in another form, it just makes sense to have Q&A do as much of the work as possible, even when it comes to something as out-of-the-ordinary as "converting" the data into Web pages. Of course, Q&A doesn't really "convert" anything. All you're having Q&A do is take the data in it's original raw form and output it in a prettier container to accommodate a special need. Data is data, right?—the rest is just window dressing.

So far, we've actually just scratched the surface of Q&A's capabilities when it comes to formatting your data for output to Web pages. You'll see more of what Q&A can do along these lines in subsequent installments in this series in the months to come.

Tom Marcellus is editor of *The Quick Answer* and enjoys doing the occasional Web Site.

```
        #55=@tn(@right(#12,#59))+@tn(@right(#13,#59))+#56;
        #14=@str(@right(#55,#59))+@str(#14);
        #56=@left(#55,@len(#55)-59);
        #12=@str(@left(#12,@len(#12)-#59));
        #13=@str(@left(#13,@len(#13)-#59));
        if #12="" and #13="" then
        {#14=@str(#56)+@str(#14); #56=""; goto #6}
        else goto #5

6:  <#6:#6=@str(@left(#6,@len(#6)-5)); if #6="" then
        goto #7 else {#57=#57+5;
        #13=@str(@left(#14,@len(#14)-#57));
        #14=@str(@right(#14,#57));#5=@str(#4)+@str(#52);
        goto #4}

7:  <#7:if @left(#14,1)=1 and @left (#1,1)=9 then
        {if @tn(@left(#14,@len(#1)+1)) >= #1 then {#14="";
        #57=0; goto #3}};
        if left(#14,1)=9 and @left (#1,1)=1 then
        {if @tn(@left(#14,@len(#1)-1)) >= #1 then
        {#14=""; #57=0; goto #3}
        else goto #8};
        if @left(#14,@len(#1)) >= #1 then
        {#14=""; #57=0; goto #3}; goto #8

8:  <#8: #4=@str(#4)+@str(#52); #60=@len(#4);
        if @len(#4)-@len(#50)=#98
        then{#99=@left(#4,#51)+"."+@mid(#4,(#51+1),200);
        start = "Done! Enter another number, or press <F10>
        for a new record."; goto start} else goto #2

9:  <#9: #9=#9-100; if #9=0 then goto #10; #11=#9*#9;
        if #11=#1 then {#99=#9;
        start = "Done! Enter another number, or press <F10>
        for a new record.";
        goto start};
        if #11 > #1 then goto #9 else goto #10

10: <#10: #10= #10-1; #11=(#9+#10)*(#9+#10);
        if #11=#1 then
        {#99=#10+#9; start ="Done! Enter another number, or
        press <F10> for a new   record."; goto start};
        if #11 > #1 then goto #10 else {#50=#9+#10;
        #51=@len(#50);#4=#50; goto #2}
```

Programming explained

The programming in Field #1 limits the number to integers less than 1,000,001, and moves to Fields #9 and #10. These fields loop. They establish the integer part of the solution, multiplying integers by themselves, from larger to smaller numbers. The correct integer would be the first one that has a value equal to or less than the target number in Field #1. This integer is placed in Field #4 and #5, and control passes to Field #2.

Now it is time to add decimal points, one at a time. Fields #2 and #3 set the stage for this math, using a loop that counts down from 9 to 0. For example, for the square root of 2, you take the integer value of 1, tack on the number 9, and multiply 1.9 x 1.9. This result is greater than 2, so you multiply 1.8 x 1.8. The programming continues to test in descending order until the result is less than 2, (which happens to be 1.4). In the same way, you now tack on the number 9 to 1.4, and multiply 1.49 x 1.49, continuing on, adding one decimal at a time until you get so sick of the process, you quit.

The programming in Fields #4, #5, and #6 actually does the multiplication, using the "paper and pencil" method described earlier. Q&A's @Str function is used to string blocks of numbers together.

Field #7 compares the result of the math to the target number in Field #1. If the result is too large, it loops back to Field #3 to try again with a number one less than before. Otherwise, the correct number is tacked on to the end of the answer stored in Field #4.

In Field #8, the statement:

```
If @Len(#4) - @Len(#50) = #98...
```

stops the loop when the solution in Field #4 reaches the decimal number assigned at the start of the record. The default is 30 decimal places (an Initial Value). You can change the number 30 to a smaller or larger number.

Finally, the correct answer is placed in the EQUALS field and you can try another number in the same record if you like.

Here are a few additional details.

- Since, for example, 1.4 x 1.4 yields the same digits as 14 x 14, I omit the decimal point during the multiplication process until the very end of the programming, where I add it back in.

- As the number Q&A multiplies grows to over 5 digits in length, the programming in Field #4 multiplies in 5-digit groups, from right to left. The method works exactly the same as multiplying one digit at a time, just faster.

- Field #5 is the addition part of the "paper and pencil" method. Similar to Field #4, Field #5 is programmed to add in 10-digit groups for numbers larger than 10 digits.

This fun Q&A 4.0 database (included in this month's download file) calculates the square root of an integer to 30 decimals or more. Type in a number, press Tab, and sit back and watch the numbers dance across the screen as Q&A does its magic.

Jon is a professional musician and piano teacher living in Vancouver, Washington, where he also designs Q&A applications for himself and others. He can be reached at hbark@juno.com

Sesame Seeds

New Table View Features in *Sesame*

WE'VE implemented Table View in *Sesame* in a way that is a bit different from Q&A's. The table itself is much more flexible. You can resize columns, swap the position of columns and sort by clicking on column headers. (See Figure 1.)

If launched from a form, Table View defaults to showing only those fields that are visible on the form. (It's always bothered me that users can get to special invisible "programmer only" fields on a Q&A form, simply by switching to Table View.) If more is wanted, Table View can be switched to show all the fields in the database.

In addition, *Sesame's* Table View provides a view of your data that is not available from Q&A. Your data is displayed in it's raw form. In Q&A, you see data as it is formatted for display. *Sesame's* Table View will show you the data as it actually exists in your database, improving your ability to troubleshoot problems and understand programming that operates on raw values.

For example, many of us use string handling functions like @Left, @Mid and @Right to parse dates. We regularly get confusion from users trying this for the first time because Q&A displays dates differently than it stores them. The user is looking at a field (#10) which says 08/27/2001. They have programming asking for @Left(#10, 2), which should give them the first two characters of the date. Instead of getting a result of "08", they get "20". This is because Q&A always stores dates as YYYY/MM/DD. It's difficult to explain this to a new user, because they can't see it. *Sesame's* Table View displays data in the underlying format, so you can see exactly what value you're working with. Incidentally, *Sesame* also stores dates as YYYY/MM/DD, just like Q&A!

—Erika Yoxall, Development Team, Lantica Software

Sesame Import from Relational Databases

WE'VE finished implementing *Sesame's* ASCII Import, and we have excellent news for those of you who may need to convert your data from something other than Q&A: *Sesame* can handle hierarchical imports without any programming!

This is a great feature for anyone who needs to convert existing data that is currently stored in a relational database program. It is also a great feature for those who have an ongoing need to import data sent to them by customers or other departments who use relational database programs.

Here's how it works. Suppose you have an existing relational database to store your Invoices. You might have the following tables: **Invoice**, **InvoiceLineItem**. The tables would be related by a key field in InvoiceLineItems matching a key field in Invoice. The data would look something like this:

```
tblInvoice
InvoiceID       InvoiceDate       InvoiceNumber
1               12/10/2001        10065
2               12/11/2001        10066
3               12/11/2001        10067


tblInvoiceLineItem
LineItemID      InvoiceID         QtySold
1               1                 50
2               1                 25
3               1                 70
4               2                 15
5               2                 10
6               3                 25
7               3                 25
8               3                 18
```

Normally, to convert this information, you'd have to build the tables in the new program, export each table separately from the old program, import each table separately into the new program, then link the key fields. With *Sesame*, you build your Invoice form with the Invoice Number and Invoice Date fields. You add a subform for the Line Items with the QtySold field. You then create one export file from your old relational database to export the three fields that actually contain your data, without worrying about the key fields. Most relational databases know how to make this kind of file. Your export file would look like this:

```
"12/10/2001","10065","50"
"12/10/2001","10065","25"
"12/10/2001","10065","70"
"12/11/2001","10066","15"
"12/11/2001","10066","10"
"12/11/2001","10067","25"
"12/11/2001","10067","25"
"12/11/2001","10067","18"
```

You open *Sesame* to your Invoice form and select all the fields for Import. *Sesame* will create three new Invoice records, each with its corresponding LineItems created and linked!

—Erika Yoxall, Development Team, Lantica Software

leave the model number and serial number fields blank. I then scan in the model and serial numbers from the bill of lading and import this data into Write. After making any needed corrections there, I want to import the data into the Inventory records. But Q&A does not give me a Retrieve Spec. How can I choose which records I want to import the data into? If this isn't possible in Q&A, will it be possible in *Sesame*?

—Robert

You cannot "import" ASCII file data into existing database records! (Importing an ASCII file into a database creates *new* records.) No database manager (not even *Sesame*) will do what you're asking! One reason is that there is no way to match or map the ASCII data to the specific existing record(s) you want to update. You'd need a unique *Key field* to match the data and you'd have to run a *Batch Post* or *Mass Update* from another database.

In your regular Inventory database, you need a unique Key field in each record that's set up as a Speedy (S or SU) field. When you create your Write ASCII file, scan in the Model number, the Serial number, *and* the matching Key field value for the Inventory record you want to update. Then, import this ASCII file into a new database design (only these three fields are necessary) in which the *Key* field is also unique and Speedy. You will wind up with one record for each line in the imported ASCII file. Now you can use either Q&A for DOS' Posting feature to post the data from the new database to the Inventory database, or Q&A's (DOS or Windows) Mass Update feature to XLookup from Inventory to the new database, retrieve the additional data, and place it into the proper records and fields in the Inventory database.

Bill Halpern is co-owner of Professional Computer Technology Associates (PCTA) in Newtown, Pennsylvania and is President and CEO of Lantica Software, LLC. 215-598-8440. bill@pcta-usa.com, www.pcta-usa.com.

What You Can Do in Table View

- Edit data
- Show different fields
- Save different layouts (Table View Specs)
- Delete records
- Show and *Enter* read-only fields (but not change them)
- Use the Q&A 5.0 Clipboard (F11/F12)
- Use the Shift-F7 Restore Record feature (Undo), as long as you stay on that record
- Expand a field with F6 and use all the features of the Field Editor
- Use many Write keyboard shortcuts. I find F4 (Delete Word) especially handy

What You *Can't* Do in Table View

- Add new records
- Change column widths. (They're fixed at 15 characters)
- Edit Read-only fields
- Do things that security would prevent you from doing in Form View
- Activate most programming

Alec Mulvey is a director of Lantica Software, LLC and also owns Keyword Training & Consultancy in Ascot, near London, England. Alec has been building Q&A applications and training clients for 12 years. Keyword Training is the UK distributor for the International English edition of Q&A. alec@keywordtraining.com, www.keywordtraining.com.