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Sesame Form Designer —Working with Fields

ALEC MULVEY

AS you probably know, Q&A's successor product, *Sesame*, is now in beta testing. Early in February beta testers will get their hands on a new beta release which includes Form Designer. This is the module that not only allows you to design and redesign your database forms, but also add, modify and test programming in your *Sesame* applications. It's an exciting milestone and signals that the product is closing in on a launch date. (See the sidebar on page 9.) In the coming months there will be more articles on aspects of Form Designer. This month I'll show you how you can add, delete and manipulate fields on a form. Compared to Q&A for DOS, *Sesame* boasts a wealth of form design-related features—far more than even Q&A for Windows.

Nature of Form Designer

Sesame's form designer is a standalone module that you access by selecting *Redesign Current Application* from *Sesame's* menu panel. What happens then is that you are working with a *Designer file* with a *.DSR.* filename extension. This is essentially a copy of your database application. You make your design changes, and then *reconcile* the updated designer file with the active database. In this manner, a developer can modify an application's design while users carry on using the application. Even profound changes, such as adding and deleting fields, are handled by *reconcile*. It's not like Q&A, where you need to tally up all the changes that have been made and then fill out a tedious Merge Spec (see my article in last month's issue). *Sesame* handles it all intelligently. And there are none of Q&A 5.0's "generation" issues to worry about when you reconcile.

In *Sesame*, as in Q&A for Windows, you can have multiple forms. You don't, however, need to have a "Master Form" containing all the fields. You can place only the fields you want on any form you like. In this article we'll be looking at the redesign of a single form.

Fields? Text boxes? Terminology

If you're familiar only with Q&A for DOS, then it might be a wrench to move to any other database because all but the simplest will have multiple forms capabilities. This introduces a complexity not found in Q&A for DOS. In a nutshell, in Q&A for DOS:

The Form = The Database = The Application

A Q&A "application" is a loose collection of databases that interact with each other via XLookup and Post/Xpost (and macros, if you want to include them).

Sesame uses two files (that you would see in Windows Explorer). This is similar to Q&A which uses a .DTF file and an .IDX file.

These files—GEMS.DB and GEMS.DAT, for example—comprise an *application*. Within that application you have *databases* where the actual data is stored. Each database can have multiple *forms* which are alternative views of the data.

If you're asking, "Why this complexity?" Why would I need multiple forms?" Here are two good reasons:

• You don't have to cram all your fields into a single form and make it 10 pages long. You can have several smaller forms that are each *task-related*.

• If you need to enhance your application with programming, you program the *form*, not the database. Each form has its own Program Spec (as well as Navigation Spec, Initial Values Spec, Restrict Spec, and so forth). Imagine how useful it would be in Q&A to have *multiple saved Program Specs*.

(Incidentally, *Sesame* databases have been referred to previously as "Record Definitions." You won't see this term used any more. We'll be referring to them simply as "databases" from here on out.)

When you add a new field in Q&A for DOS, you are adding it to the database and simultaneously adding a "thing" on the form to display it. This "thing" is called a *field* in Q&A and a *control* in Microsoft Access. A control in Microsoft Access is anything on a form, be it a field, a label or a graphic line. In *Sesame*, we use the term *layout element* instead. Layout elements can be fields, placeholders for fixed text (labels, headings, and the like), frames to display pictures, or fancy devices such as combo boxes to display pick-lists. The layout element used to display field data is called a *text box*, and it's these that we are going to be concerned with in this article.

Adding fields

You can add a field in three ways. One way is to go to the *Field Manager* and add it there. Sesame's Field Manager is a module, inside the Form Designer, where you can make any structural changes to the application. This includes adding, deleting and renaming databases and fields, and changing data types (text, number, date, and so forth). But this is the more "technical," non-friendly way to go about it. In some other databases (including Q&A for Windows) this is what you *have* to do. You don't have to do it in this way in *Sesame*, however, because there's a much easier, more familiar way, and that's the only way I'll be showing you now.

Okay, we're in Form Designer and we have a form open for redesign. Let's say it's a form called the "AMSearch" form. We want to add a field. Now, in Q&A for DOS, to add a field, you just put the cursor where you want it, type the field label followed by a colon (:) and you have a new field.
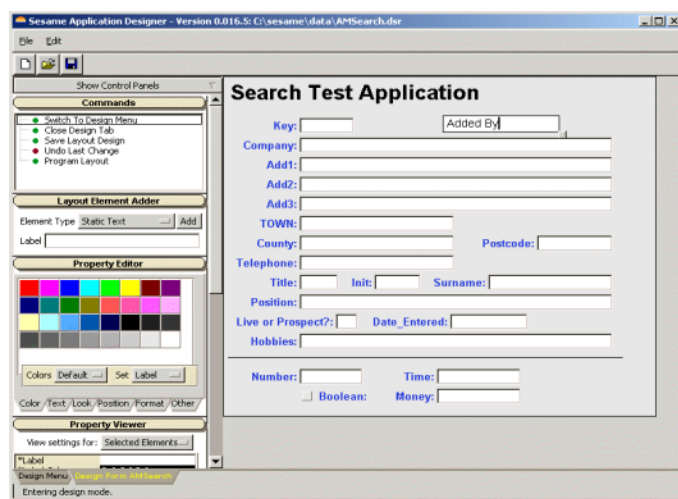
Well, *you can do exactly the same thing in Sesame*! (See Figure 1.)

If you look at Figure 1, what has happened here is that the cursor was put at the position that is to be the left-hand edge of the *field* (not the label). This can be done by clicking with the mouse, or by clicking once and then using the arrow keys to move around the form, just like in Q&A. Then, you type the text that is to be the label; in this case, "Added By".

The next thing to do, if you want this to be a field, is to type the colon. What immediately happens then is that a field is created. (See figure 2 on following page.)

If you omit the colon—just type some text and then press Enter—then instead of a field it would become some fixed text on the form. In *Sesame* we call this *static text.*

If you think that's pretty easy, it gets better. If you want a *series* of fields, typing a label plus a colon then pressing Enter will take you down the form to the *corresponding* position below, ready to repeat as desired. (See Figure 3 on following page.)

There is also a *third* way to add a field—using the Layout Element Adder. (See Figure 4 on following page.)

You select the type of layout element you want to add—it might be static text or a checkbox—type what you want as a label, then click on *Add*. The new layout element appears on the form at the cursor position. If you don't

Figure 1. Adding a field by typing it on the form.

click on the form first, the field appears at the top left of the form and you can then drag it into position manually.

The Layout Element Adder is the only way to add elements other than static text or text boxes ("fields"). Well, that's not quite right. You can add a graphic line (like a separator line) using this method, but there's also a nifty shortcut for adding a line. You click on the form and hit the hyphen/underscore key (shifted or unshifted), and *Sesame* generates a line that you can then optionally resize.

That's all you need to do to create text fields. All new fields added this way are text fields. You can then subsequently change their field type, formatting, and so forth—a subject I'll cover in a future article.

The changes to the form are saved by selecting *Save Layout Design* from the Application menu.

Deleting fields

You could delete fields in the Field Manager. It's easier though, to remove a text box, or any other layout element, from a form, to simply select it and press the Delete key.

Selecting multiple layout elements

Sesame offers two ways to select multiple layout elements.

Method 1: Click on an element to select it, then hold down the Shift key and click on another one. Keep the Shift key down and click on more elements to select them. The elements don't need to be adjacent to one another.

Method 2: "Rubber-banding." This technique will be familiar to those who have used any graphical package such as a drawing or desktop publishing application. But for those who haven't, I'll describe it. Using your mouse, you "draw" a rectangle around the form elements you wish to select. It's called "rubber-banding" because it's like taking a rubber band, expanding it with both hands and placing it around several objects at the same time. The difference, though, is that in *Sesame*, as in most programs

Figure 2. Typing a colon creates a field.

that support this technique, you don't have to completely enclose the layout elements. As long as any part of an element is "touched" by the selection rectangle, it will be included in the selection. (See Figure 5.)

In Figure 5, for example, I clicked above the Postcode field, held the mouse button down and described a rectangle by dragging down and right. The Postcode, Surname and Position field are partially enclosed, so these become selected on releasing the mouse button. (See Figure 6. on page 8) Q&A for Windows users will be familiar with this technique. In *Sesame*, though, you don't need to specify the selection tool first, you just click and drag the pointer around the elements you want to select.

Moving Fields

Sesame has a host of tools to help you get your form looking good. The tools for moving, resizing and arranging layout elements are particularly comprehensive —and easy to use.
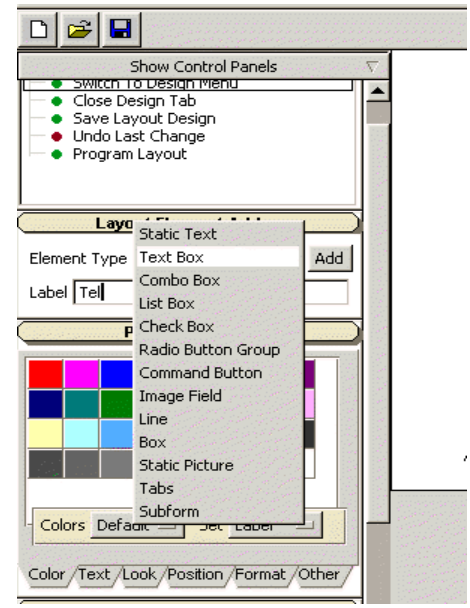
Figure 4. Layout Element Adder - picklist choices.

Figure 3. It takes just seconds to add a series of fields.
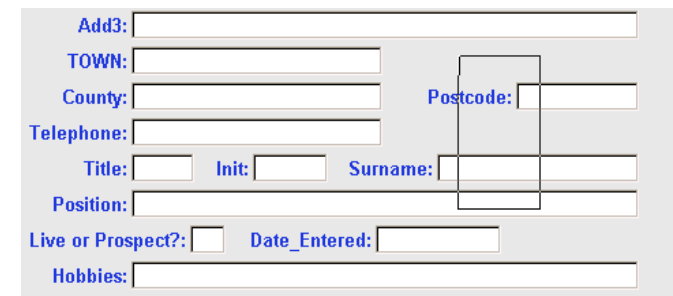
Figure 5. Rubber-banding. This will select the Postcode, Surname and Position fields. (Figure 6 on page 8 shows result.)

Painless, Brainless One-Click Backups

TOM MARCELLUS

BACKING up the data on your computer each day can be almost "impossible" to do, but it needs to be done—particularly when the lifeblood of your company or department is the information stored in continually-updated databases.

I want to talk to you about making your backups easier and faster. Backing up the data that's most important to you shouldn't take a lot of time or interfere with your work. It should be simple, painless, and *fast*—not something you put off because you're too busy or had to leave the office early.

Types of backups

If you backup the files on your hard drive to the same hard drive, you risk losing them if the hard drive fails. The entire hard drive doesn't have to go south. All it takes is a few sectors going bad in the right spots. A power spike, brownout or sudden outage can do it. Manually powering off the computer while it's writing data can do it.

Even if you back up to a second hard drive on the same computer, what happens if a virus, machine-crippling software problem, or hardware failure makes the computer unusable for a day or two? You've got no data. You can't work. If the computer gets stolen or caught in a fire—well, you're sunk.

Tape backup systems are good, but they have their own downsides. First of all, dealing with tape backup software can be daunting. You typically get screensful of backup, restore, file selection and compression options. You can easily get lost trying to figure out what does what—and is the stuff you really need to back up getting backed up every time?

With tape backups you need to "retension" your tapes periodically to avoid read errors. You also have to *restore* your backed up files once in a while to make sure they're actually restorable. (I hear, "The backup was no good" more than I hear "We didn't back up.")

Also with tape backup units, the backed-up data is unuseable except with the same type of tape drive. If it fails, you have no way of getting the data off the backup tape until you replace the damaged drive with one of the same type, which could take days.

But perhaps the biggest inconvenience of tape backups is that they can take so long. From the time you click "OK" to start the backup, you have to wait patiently while the machine whirs and whines and chugs back and forth reading the tape, just getting it ready to start backing up the selected files. (Did I remember to check to make sure the *right* files are selected?)

Who's got the time or patience?

If you've got someone (or something) doing your daily backups for you—such as the server automatically backing up all its files each night—that's fine. You'd just better check from time to time to make sure that the databases *you* use are getting backed up and *are* restorable.

I witnessed a crisis not long ago when an automatic server backup program—whose default was to *not* backup *open* files—wasn't backing up key databases because some users were leaving Q&A minimized on their computers. Even though Q&A was at the Main Menu on those PC's, the last database the person had used was *still* open. The backup program was skipping these. You can guess what the nature of the crisis was.

It's gotta be easy and fast

Bennie down in accounts receivable knows how to use his computer to do his work, but he isn't very savvy with computers in general. With all the complexities and added time involved, are you going to just hand him a tape backup unit with sophistacated backup software, and feel confident that he's running his backup at the end of each day? Probably not. What you give Bennie has to be really simple—an icon on his desktop that says "Daily Backup." When he double-clicks on it, he's prompted to insert his diskette and press Enter. When he does this, all his important files are quickly backed up for him onto a removable disk. He isn't required to think about it, make decisions, or sit there and twiddle his thumbs for 20 minutes. He just pops the diskette into the drive and in no time the backup is done and he can put the diskette back where he got it.

And the beauty of a scenario like this is, the files on the backup diskette are regular old DOS/Windows files. They're not encrypted, compressed or altered in a way that makes them unreadable and unrestorable except from the software that backed them up. *The backup files can be quickly and selectively restored in a fully usable state to any folder in any partition on any hard drive on any computer.*

When I recently set up a client with a simple backup routine like this, like magic the backups started occurring with regularity. The user actually expressed astonishment that backing up could be so easy. (She had been through the more comprehensive but complex and time-consuming

backup routines which, for these very reasons, she didn't perform routinely enough.) Backups were suddenly being made by this person several times a day during heavy database usage. As the developer, I was able to walk away feeling confident that this client was getting her essential data backed up as often as it should be.

What did it take to make backing up this easy? Not much. Just an inexpensive ZIP drive and a simple DOS batch file.

ZIP It!

If you've never used a ZIP drive, well, they're the bee's knees when it comes to making backups as simple, practical and convenient as can be . And we *do* want backing up to be simple and convenient, because that's the only way it'll get done with any regularity.

These ZIP drives, which use diskettes that are slightly larger than regular 1.44M diskettes, come in 100MB, 250MB and 750MB external models and range in price from a mere $99 for the 100MB model to an affordable $175 for the 750MB model. You can find out about them by visiting *www.iomega.com.*

(For larger backups, you can get a more expensive 2GB JAZ drive from the same maker.)

All of the drives are available with a USB interface to your computer. You can get the 100MB model in a parallel port "pass-through" configuration that's ideal for "legacy" (I just love that word) computers. You don't need a second parallel port on your computer. You simply plug the parallel cable from your computer into the back of the unit, and run a second parallel cable between the unit and your printer. When you're printing, the print job passes right through the ZIP drive to the printer.

It's a drive!

The coolest thing about Iomega ZIP drives is that they're real drives. When you install the ZIP drive software on a Windows PC, your computer immediately recognizes and treats the ZIP or JAZ drive like another drive, assigning it the next available drive letter and so forth.

For example, If your computer has a regular C: drive along with a D: drive for the CD-ROM, you would now have a new E: drive for the ZIP device. You can copy, move, delete, rename files to and from this new drive as though it were just another drive, which it is, in virtually every respect.

The one difference is that a ZIP or JAZ drive is a *removable* drive. If need be, you can simply unplug it from computer A and plug it into computer B. If computer B doesn't have the ZIP software already installed, you install it. You're back in business in a flash.

If you just want to make a quick backup copy of a database you've modified, whether for safe-keeping or to take it home with you to work on further, you simply go to any List of Files screen in Q&A, highlight the database, press F5 to copy, and type in *E:\dbname*, where *E:* is the ZIP drive and *dbname* is the name you want to assign to

the copy of the database.

In Windows Explorer, you can drag files onto the ZIP disk (to move or copy them). Remember, though, when you copy, move, or rename a Q&A database *outside* of Q&A, you have to do so with *both* the .DTF and .IDX files.

You can't do any of the above with a tape backup unit, though you *can* do *some* of it with a CD-RW drive (a drive that burns the type of CD that can be written to more than once). A rewritable CD-RW drive, like a ZIP drive, uses a portable disk, but the units are more expensive and with a greater tendency to fail. (This is my own experience.) CD burners are also slower than ZIP drives and can't really be made to work with all the same familiar characteristics and capabilities of a real drive.

The one big advantage a CD burner has is that, like a regular old floppy disk, you can burn a CD on computer A and immediately use it on computer B. One aggravating thing about CD burners, though, is that the files on the CD's they create are all made read-only when burned onto the disk. Accordingly, when you copy files from the CD to your computer, you have to remember to open their properties (right-click on the file in Windows Explorer) and uncheck the read-only attribute before you can use the file for both reading and writing. A mistake Q&Aers often make is in assuming that they can burn their databases onto a CD and then use the disk as a kind of database viewer. No can do. When you access a Q&A database for any operation—including a simple search— Q&A writes to the file. If it can't, you'll get an error message. A Q&A database on a CD, before it can be accessed at all, has to be copied (both the .DTF and .IDX file) to a real drive—which can be a ZIP or JAZ drive in lieu of a hard disk drive—and then have the read-only attribute removed on both the .DTF and .IDX file.

Creating a desktop shortcut and batch file

There are all kinds of ways to use a ZIP or JAZ drive, but I'll focus on the use discussed earlier—backing up a predetermined set of files in a flash.

The batch file shown on page 11 is an actual batch file I installed recently as a desktop shortcut on a client's computer. It's designed to make backups of only the can't-do-without files that get used on a daily basis. In addition to selected databases and a few other files, it backs up the entire Q&A documents directory because it doesn't take up much disk space. You'll notice that all the batch file is doing is prompting for a ZIP disk, then copying a bunch of files from the user's C: and D: hard drives to the G: ZIP drive. There's nothing about this batch file that's any different from any batch file that copies files from one disk to another. In this case, about 60MB of files get copied to a ZIP 100 drive, leaving 40MB to spare. The task is completed in no time. As far as the user is concerned, there are no "steps" to take to prepare for or run a backup. All she has to do at the end of the day is click her "Backup" icon, insert her diskette, and press Enter. It

@Help

EDITED BY WILLIAM HALPERN

Missing Q&A 5.0 Speedfix Patch—Symptoms

I bought *The Q&A/New PC Setup Guide* offered at quickanswer.com to help me install and run Q&A 5.0 on my new Windows XP PC. I downloaded and used Lesspace so I wouldn't have to partition my hard drive, and it apparently works without a problem. But then Q&A tries to start. Most of the time I get a blank screen with a flashing cursor. Occasionally Q&A will start after I hit the Esc key several times and, once started, it seems to work properly. But when I exit Q&A, it won't restart. I can't figure this out. Any ideas?

Lou

Your problem here is not Lesspace or the instructions in the *Guide*. It is with the version of Q&A you are using. What you are describing indicates that the *Speedfix* patch was never applied to your copy of Q&A 5.0. Go to *www.quickanswer.com*, navigate to the *Freebies* page, download and run the Speedfix patch, and all will be well.

While I am on the subject of Q&A versions, let me remind everyone that there are lots of Q&A 4.0 users running the "buggy" version of that program. Start your copy of Q&A and press Ctrl-F3 at the Main Menu. This will give you the System Information screen. On line 5, you will see the date of the Q&A program files you are running (reflected by the date of the qa1.exe file). If this date is earlier than 9/20/1993, (US or UK) you have a bad version. This is also true if you are in the UK or Europe and are running Q&A 5.0 (dated prior to 10/06/1995) instead of Q&A 5.01. You can get an inexpensive replacement CD in the US, from PCTA at *www.pcta-usa.com* or in the UK or Europe from Keyword Software at *www.keywordsoftware.com*.

Lost Print Enhancements in Q&A 5.0

I have an invoice that I generate using Q&A for DOS's *File / Print* feature. This allows me to specify where I want each field printed. Now, it doesn't matter if I use a macro to print, or if I step through the routine manually to print the invoice. What happens is as follows.

I use an Alt-S macro to start the invoice print job. I have it pause at the Retrieve Spec so I can type in the invoice number(s) that I want to print. After typing the number(s), I hit Enter and the macro resumes, printing the invoice(s). If I am printing just *one* invoice (and I don't need to press F6 to expand the field to type in multiple invoice numbers) all of my print enhancements—bold, double-wide, superscript, etc.—work fine.

However, if I have to press the F6 key to expand the invoice number field so I can print more than one invoice (using either a ######;###### or ######..###### format for my Retrieve Spec parameter), I lose all of my print enhancements. The double-wides, bolds, superscripts are gone and everything is thrown out of whack. I have tried the IBM print driver, the Fujitsu DL driver and the Epson LQ-2500 drivers, which the Fujitsu DL-4600 supports. Always, if I only print one invoice without the F6, the enhancements work fine. If I expand the field even to type just a single invoice number in it, the enhancements go away.

I brought this up in the old Delphi Q&A user group forum and mentioned it to John Dow. The response I got from both is that in Q&A 5.0, when adding Retrieve Spec parameters that exceed the width of the (unexpanded) field, print enhancements will disappear. And since Q&A 5.0 was no longer supported by Symantec, the flaw would not be repaired by them. I know someone designed fixes for the incorrect date problem and the problem where Q&A 5.0 didn't like running on machines with processors faster than 233MHz, but I don't know who did them. I don't know who else to contact. Any ideas?

Gregg

We have done some testing and what you are seeing is indeed a bug in Q&A. Regular enhancements like bold and underlining are not affected, but selected fonts (fonts added to the font selection screens) do disappear. There is *no* workaround and there is no one to work on this since the problem is buried deep in the internal code of the program which is proprietary to Symantec.

However, the good news is that this is only a problem when you are printing via the *File / Print* menus. I have many customers who do the same sort of work and need to print out multiple invoices which require expanding the field at the Retrieve Spec screen. They also require

heavily fonted documents. We accomplish all of this by using a well designed, fonted, merge document created in the Q&A Write word processor. (You can still place your fields so they'll print where you want them.) You can press F6 to expand a field at the Retrieve Spec and get all your fonts in the final printing. You can print manually this way or use macros.

Another way to accomplish the same, or an even better, result is to use Q&A for Windows in tandem with your Q&A for DOS application. If you are using Q&A 5.0, you can simply have your printing macro launch an External Program (Q&A for Windows in this case) with the right database open to a specialty form, or showing a button to print a free-form report. In Q&A for Windows you not only have no restrictions on fonts, you can even print in color and include graphic images. So, you have several ways around your unsolvable problem, which is one of Q&A's great strengths.

Copying a Lookup Table in Q&A DOS

I have Q&A 4.0 and 5.0 on different computers. I recently spent a lot of time working on a database's Lookup Table in Q&A 5.0. I want to copy it over to a Q&A 4.0 database on the other computer but I can't see how to do it. Is there anything I can do to make this work without recreating the table from scratch in the other database?

Maxine

You can do it in one of the following two ways:

- Get a copy of Q4LOOK available at *www.quickanswer.com* (Freebies page) and export your Lookup Table from the Q&A 5.0 database using the utility's "Macro" format. If all your table entries are short and do not require F6 to expand the cell so you can see the entire entry, then all you have to do is start Q&A 4.0, load the q4look.mac macro file (*Shift-F2 / Get Macros*), proceed to *File / Design / Program / Edit Lookup Table* for the target database, and press Alt-L from the top left cell. Your 5.0 Lookup Table will be inserted in your 4.0 database. If the entries in your table are lengthy and do need the F6 expand field to see them, you can edit the macro by adding *<F6>* to the start of each line and then replacing every *<tab>* with a *<tab><F6>* sequence. (You can do this in WordPad or Q&A Write.) You can then save the modified macro, reload the macro file, the run the macro from inside the new Lookup Table. *Do this latter part only on a backup copy of the database in case something goes wrong.*

- Open a copy of Q&A 4.0 and a copy of Q&A 5.0, each in its own window. Navigate to the Lookup Tables in each one. Use the Windows Copy and Paste functions (available on the tool bar) to copy the data, cell by cell, from one table to the other.

Option one, of course, involves much less work, particularly if the Lookup Table contains many filled rows.

Turning Numbers into Dates

I need a database with a record for every day of the year for the years 1998 through 2004. I am sure that Q&A must convert dates to numbers to store internally, but I haven't found a function or formula to convert numbers into dates. If so, it would be easy to create consecutive numbers (that correspond to dates) in a spreadsheet, import them into Q&A, and have Q&A convert them to dates. Do you have any suggestions?

A. C.

Q&A stores dates internally in the format YYYY/MM/DD. This is the internal "number" that Q&A uses to tracks dates. If you export date fields from Q&A, this is the format you will see. It is not strictly a number because it does include the two forward slashes ("/"). But you can use Q&A's @Num function to strip out these slashes and return just the digits.

For example, if field #1 is a date field containing *01/14/2003*, and the programming in field #2 (a text field) is *<#2: #2 = @Num(#1)*, then Q&A will set field #2 to *20030114*.

Is this what you are looking for? This way, every day will be unique and very specifically convertible back to a date.

Something to keep in mind is that Q&A cannot be made to run database programming statements during a data import. You have to import the records first, then Mass Update them to perform any conversion(s) in them.

If you plan on importing numbers (from a spreadsheet, for example) that represent dates, you should insist on a fixed length format for those numbers in the spreadsheet. For example, every number/date should be exactly eight digits, such as *20011225* for December 25, 2002 and *20030205* for February 5, 2003. Only in this way can you use Q&A's text-parsing functions to reliably turn such numbers into Q&A date values.

Here's a sample program to do that. It assumes that **Date as Number** (a Number or Text field) contains such a number, and that **Number as Date** is a Date field:

```
> Number as Date = @Left(Date as Number, 4) +
  "/" + @Mid(Date as Number, 5, 2) +
  "/" + @Right(Date as Number, 2)
```

When this program executes, the **Number as Date** field will be set to the date that corresponds to the number in the **Date as Number** field. The date will appear in the date display format you've selected for the database at the Global Format Options screen. The program is of course adaptable for use in a Mass Update Spec.

Sesame Form Designer cont'd from page 3

You can move a layout element in two ways. The mouse technique is to simply drag it to a new location on the form once it has been selected. But there are times when this can be awkward, where you need more control. You can also use the keyboard. You can click on the layout element (to select it) and press the following keys to move the field:

Ctrl + Left Arrow	Fine movement to left
Ctrl + Right Arrow	Coarse movement to right
Ctrl + Up Arrow	Fine movement up
Ctrl + Down Arrow	Coarse movement down

Notice that there are both "coarse" and "fine" movements. To position an element precisely, you might use the use the right arrow key to establish its approximate position, then the left arrow key to home in on exactly where you want it. It might sound complicated, but it isn't.

Fine movement is one pixel. Coarse movement is 10 pixels. This is not an absolute measurement but depends on your screen resolution. If your screen is set to 800x600 resolution, then a layout element that's 80 pixels wide will be 1/10th of your entire screen width. On a screen set to 1600x1200 resolution, the same element would be 1/20th of the screen width.
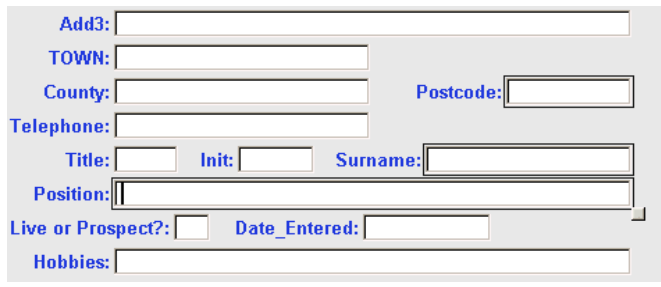
Resizing fields

To resize a field—*yes*—you can also use one of two techniques. When you select an element, it acquires a sizing handle at lower right (see Position field in figure 6). Click on this and the mouse pointer turns into a broad four-headed arrow. You drag this in the desired direction to resize the element.

For keyboard resizing, it's the same as moving, but with the Shift key rather than the Ctrl key:

Shift + Left Arrow	Make narrower
Shift + Right Arrow	Make wider
Shift + Up Arrow	Make shorter
Shift + Down Arrow	Make taller

The left and top edges of the layout element stay in place.

Figure 6. Postcode, Surname and Position fields selected by "rubber-banding." (The selected field's borders s are thicker and raised.)

Note that there are not coarse and fine adjustments for resizing—it's always a fine adjustment.

The fact that you can perform these actions on multiple objects makes it very easy to move or resize a group of layout elements at the same time.
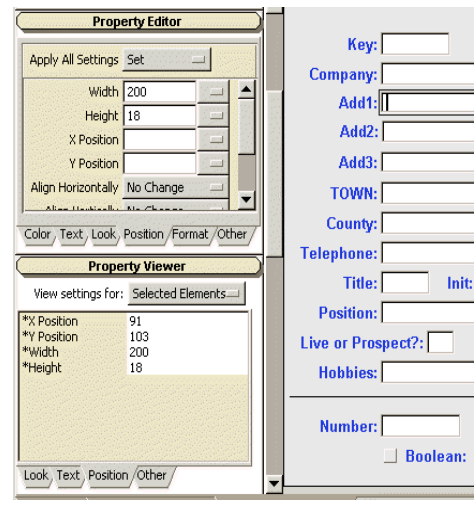
I have an admission to make. I lied. There aren't *two* techniques for moving and resizing layout elements. There are actually *three*! (*Four* if you include programming, because you can control the size and position of layout elements via programming statements. But this is a topic for another day.)

Although you'll use the mouse or keyboard technique day-to-day, there's another way to manipulate layout elements. It gives fantastic control and has some neat tricks.

Using the Property Editor

You can use the Property Editor to actually type values for the size and position settings of layout elements. (See Figure 7.) But there's more. When you type a value to set, for example, "Width," then click on the button to its right, the value is set for that layout element. Click on another element, and the values are retained by the Property Editor. So you can click again to set the same values for *that* element. You can even set multiple values (say, for width and height and horizontal position) and apply them *all* by clicking on *Apply All Settings*—an easy way to achieve consistency.

But it doesn't stop there. Rather than typing *absolute* values, you can type *differential* values. (See Figure 8 on following page.) Suppose you want to make the width of one or more layout elements a bit smaller; you can type *-10* (minus 10) into the Width box and apply it.

Figure 7. Property Editor and Property Viewer.

You see the result instantly. Still too wide? Click again until it looks right.

Arranging layout elements

This feature is really neat! You can select one or several elements (which do not have to be adjacent—remember the Shift + Click technique) and alter their position relative to one other. (See Figure 9 on following page.)

You can adjust horizontal and vertical alignment relative to each other; horizontal and vertical spacing (make more, less, or equalize), and also set the size of them all to match one. Here's how these work:

Alignment
Select multiple layout elements. If you set, for example, "Left" alignment, then they are all aligned to the left-hand-most element.

In the example shown in Figure 10, to align the Town and County fields with Add1, you would select all three, then specify "Align Horizontally / Left."

Vertical alignment works similarly for lining up fields arranged left to right across the form. Should you accidentally choose "Horizontal" when you meant "vertical," then you are likely to get the fields all stacked up upon one another. A case of quick undo!

Horizontal and Vertical spacing
This means adjusting the space between layout elements: spacing them out, closing them up, or—most useful—spreading them out evenly by selecting "Make Equal."

Size to Match
This is similar to alignment, but instead of lining up the multiple layout elements, it makes all the selected layout elements the same size. (See Figure 12.)

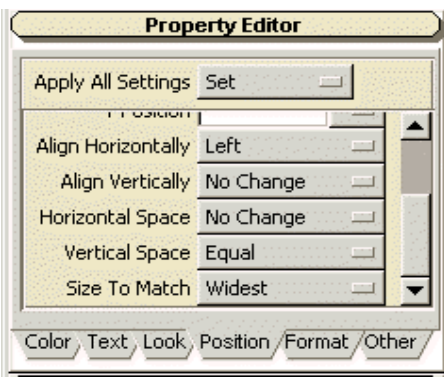**Figure 8**. Using differential values for width and height.

Figure 9. Arrangement features in the Property Editor.

Conclusion
Sesame's Form Designer provides a spectacular wealth of tools to create good-looking yet practical forms. I think you'll find it easy to work with—and *fun*!

Sesame Beta Program Ramps Up!

Sesame beta testing has been in progress for several months now and is coming along well. Early this month, testers will take delivery of a substantial new build. For the first time, they will get their hands on the full Form Designer module. This includes Field Manager (for structural alterations). Rather than working with provided sample databases, they will now be able to build new databases and applications from scratch and make any modifications they want to new and existing ones. All programming will be active, including XLookups to other databases within the same application and other *Sesame* files. Testers will also be able to convert their own Q&A databases and work with them and modify them at will.

What's more, the scale of the beta program will be substantially increased, with a couple of hundred new testers being added from a pool of nearly a thousand beta tester applicants.

All in all, there will now be hundreds of people helping Lantica Software make *Sesame* a superb product.

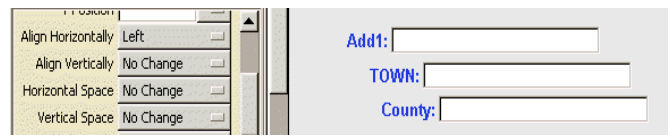**This is a major milestone in Sesame's development.**

Figure 10. Fields before aligning to Add1. (See Figure 11.)
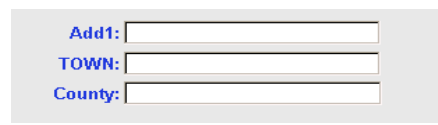
Figure 11. Fields after aligning to Add1.

Figure 12. Sizing selected fields to match the narrowest.

Alec Mulvey is a director of Lantica Software, LLC and also owns Keyword Software & Consultancy in Ascot, near London, England. Alec has been building Q&A applications and training clients for 13 years. Keyword Software is the UK distributor for the International English edition of Q&A. alec@keywordsoftware.com, http://www.keywordsoftware.com.

Figure 13. The result of the action shown in Figure 12.

@Help...

Retrieving Records with @Insert

I have a question regarding a Retrieve Spec in a date field (Q&A 5.0). Maybe you could help me with it. My Retrieve Spec is this:
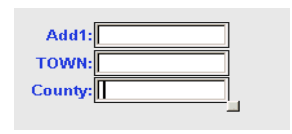
```
#1: {#1 >= @Insert( "f:\qa\docs\prog\audit.dte" )}
```

Field #1 is a date formatted field. If the *f:\qa\docs\prog\audit.dte* ASCII file contains *01/05/2003*. What I end up with is *all* the records rather than just those greater (later) than or equal to (the same date as) *01/05/2003*. Not what I want. Your help would be appreciated.

Andrew

This is a really strange one. You almost had us stumped. When Q&A opens an ASCII file, it really does not know what it is (even if you have set it as the default type of document). But when it opens one of its own formatted files, it knows immediately what it's got. Try saving your date file in Q&A Write with Shift-F8 and you will find that your Retrieve Spec suddenly works. We tried many variations of text files in date field retrievals and they just won't work. So, add the one step to save it as a Q&A document file.

Q&A Database Capacities

How large a database (number of records or file size) can Q&A 5.0 for DOS handle? I am working with a "Do Not Call" list from the state of Pennsylvania that contains 2.6 million records.

Jim

The "official" published design limits for Q&A 5.0 databases are:

Pages per form - 10
Fields per record - 2,045
Fields per page - 248
Characters per record - 64,512
Characters per field - 32,767
Number of records per file - 16,000,000
Maximum file size - 1 GB

These are all probably attainable. However, if you want a workable database that is easily searchable and sortable, the practical limit for the number of records is not much more than 105,000 per database. The number of fields per page should not exceed approximately 150. And the characters per field will be limited by available DOS memory and will probably be under 20,000.

I don't say something like this often, but I would not recommend the use of Q&A for a 2.6 million record database.

Can You Recommend Compatible Hardware?

I'm looking at a Gateway computer. 2.1Ghz Celeron processor, 256mb SDRAM, 40Gb UATA drive. Will I be able to run Q&A 5.0 on it? If I use the patched version, do I need to partition the hard drive?

Fred

With regard to your second question, there is no "patched" version of Q&A that enables you to use your databases in a larger than 2G partition without risking corrupting them. You either need to use Lesspace in conjunction with Q&A, or partition your hard drive.

Your first question is impossible for us to answer without actually having the machine here. The best way to check is to call Gateway and make sure that the computer does *not* use *shared* memory and that it is capable of providing *Expanded* memory (the memory between 640K and 1M). Some manufacturers make use of this memory for hardware-related links or video sharing.

If you are close to a Gateway store, they will allow you to bring in your software and install it on a PC. Do so with Q&A, then press Ctrl-F3 at the Main Menu (for the System Information screen) and find out if Q&A is seeing 128K of Expanded memory on line 15. Before you do this, though, make sure you are running Q&A from a shortcut and that the memory settings in the shortcut are set to provide 1024 for Expanded memory. This is the only sure way to know. If you can't get to a Gateway store, make sure you can get a full refund if you decide to return the machine for any reason.

Using Q&A over a WAN

I recently installed Q&A and a database file that my company uses on a Windows 2000 Server platform using Terminal Services. When my staff on the LAN accesses the database file it runs fine, but when my agents in several branch offices access it through the WAN, they receive an error message that says the database file can't be opened since it is read only. Is there any solution to this problem?

Emery

This is not a Q&A issue. What you need to know is that both the DTF and IDX file must be available, and users must have full read/write access to them. Since you are using a WAN (Wide Area Network) and access across the LAN works perfectly, there is obviously a difference in the access rights setup. You further complicate the issue with the use of Terminal Services which set up separate, specific instances of the operating system for the incoming WAN user. My only experience has been with CITRIX (the "sophisticated" version of Terminal Services) on a WAN and that has always been able to be set up and run without problems. Your network people need to check their setup and permissions on the affected drives/files.

Backups... cont'd from page 5

couldn't possibly be easier. And she gets a reassuring visual feedback—file by file—that the files she *knows* should be backed up *are* being backed up.

Parting Notes

Backing up your most important files to a ZIP drive is no substitute for regularly backing up your entire computer to a tape drive, external hard drive or other device— particularly in the case of a server that backs itself up nightly onto tape drive or other large-capacity device.

Programs that create a fully restorable *image* of your hard drive—such as Norton Ghost—are gaining popularity. You don't want to save a drive image to the same hard drive for the reasons discussed earlier. A 2G JAZ drive or external hard drive is ideal for this.

Keep in mind that when backing up to another drive from which files can be *run*—this includes ZIP and JAZ drives—those backed-up files are potentially *volatile*. If they contain viruses or can execute files that contain viruses, there's a risk. This is *not* the case with files on a tape backup, where they're non-volatile since they can't be run (or scanned for viruses, either) from there.

On the subject of viruses, you can—and should— routinely scan all volatile drives using the latest virus definitions for the anti-virus product you're using. This should include any ZIP or JAZ disks you use. It would do little good to knock out a virus in a hard disk file only to restore a backed up copy of that file that was still infected.

For daily ZIP drive backups, it's a good idea to have one for each day of the week. You label them MONDAY, TUESDAY, WEDNESDAY and so forth, and use them in rotation. This way, if a crisis occurs and the previous day's

```
@echo off
echo.
echo Backup Main CCCC QA Databases
echo ADDRESS, CHECK, FEC, PACADD, PACCHECK, PACFEC
echo.
echo Backup all CCCC QA files in D:\QA\DOCUMENT
echo.
echo Backup CCCC QUICKEN Data Files
echo.
echo Backup FECFILE Files
echo.
echo Insert Today's ZIP DISK in ZIP Drive
echo.
pause
echo.
echo on
copy d:\qa\database\address.dtf g:\
copy d:\qa\database\address.idx g:\
copy d:\qa\database\check.dtf g:\
copy d:\qa\database\check.idx g:\
copy d:\qa\database\fec.dtf g:\
copy d:\qa\database\fec.idx g:\
copy d:\qa\database\pacadd.dtf g:\
copy d:\qa\database\pacadd.idx g:\
copy d:\qa\database\paccheck.dtf g:\
copy d:\qa\database\paccheck.idx g:\
copy d:\qa\database\pacfec.dtf g:\
copy d:\qa\database\pacfec.idx g:\
copy d:\qa\document\*.* g:\
copy c:\progra~1\quickenw\cccc\*.* g:\
copy c:\fecfile4\files\*.* g:\
exit
```

backup disk got chomped by the boss's mutt, you'll still have the one from the day before.

With a ZIP or JAZ drive, it won't put you out to back up your most important files several times a day. After completing a heavy session updating your database, just copy it over to your external drive right from Q&A

Don't leave your backup media lying around. They can be stolen or wrecked by being stepped on or drenched with Snapple. Ideally, they should be taken off the premises each night. Storing them in a heat-proof, moisture-proof media vault is the least you can do (visit *www.fireproofvault.com/fireproof/mediasafe.html*).

I've long been a fan of ZIP and JAZ drives and have used both extensively over the years. Although I periodically back up my entire computer onto tape, I routinely back up my most important files to my 2GB JAZ drive. I don't back up programs that I can reinstall, only files I created that I couldn't live without.

While a pack of 10 quality 1.44M floppies will run you $5.00. A pack of 10 100M ZIP disks will cost $90.00. But if you look at the *cost per Megabyte*, you'll see that floppies wind up costing about four times as much. In any case, backing up to floppies these days is a laughable non-option for most computer users.

All Anti-Virus Programs Not Created Equal

Not only must you keep your virus definitions scrupulously up to date, you should buy and install the latest version of the anti-virus program you are using. Case in point. I recently scanned my system with Norton Anti-Virus 2000 using the latest virus definitions. It found nothing. Later that day I installed Norton Anti-Virus 2003. This newer version, using the same latest virus definitions (I presume), found, in one of my files, an old but extremely dangerous virus that we don't see around much anymore.

Suspicious, I then went to *www.housecall.antivirus.com* and took advantage of their free online virus scan. Their scanning engine and virus definitions found several *more* old viruses embedded in old PKZIP files I didn't even realize I still had. If I had stumbled onto one of these, unzipped it out of curiosity and run the infected file within it—*kaboom!*

If you're really serious about guarding against infected files, you need to face the fact that no single anti-virus product can find 100% of them 100% of the time. When scanning a computer for viruses, you stand the best chance of finding them all by using *more than one* up-to-date anti-virus product, each with its latest set of virus definitions.

Tom Marcellus is editor of *The Quick Answer*

But Nothing Was Changed!

We have been subscribers to *The Quick Answer* from the beginning. I have a problem that just started and is driving me crazy. Within the past week my Q&A has been very slow responding to keystrokes. I searched the *Quick Answer* database at www.quickanswer.com and found a few suggestions. One of which was running in full screen mode. When I run in full screen mode, Q&A performs just fine, but every time I switch back to window mode, Q&A gets sluggish. I have had this computer for over six months and have not had any problems up until this past week. Would appreciate any assistance or suggestions.

Nan

You have obviously changed something in the Windows environment within the past week or so. When Q&A runs in a window it is competing with (or at the mercy of) other programs running in the background, such as anti-virus checkers that may want to check each of your keystrokes—or even a virus or spyware program. When run full screen, it gets the full attention of Windows. You really need to find out what you have changed, added, or removed and then undo that change—or provide us with more details so we can give you more information.

Speaking of changes, in the past week alone, I have had the sad experience—*twice*—of informing one of my clients that they have blown their computer's motherboard and need to have it replaced or buy a new "box." What caused this? *Changing the mouse without first powering down the computer!* Never, ever change your PS2 mouse or keyboard without first shutting down your computer, disconnecting the power cord, and pressing the power button to ground the system. Some changes (software) may affect *how* you can work, but others (hardware) can affect *if* you can work. Be careful with both.

Printing "Everything" Darker

I need Q&A for DOS to print darker everywhere—the record on the screen (F2/ F10), reports (via Print Options), and from Print Specs. I can make a Write document print darker by using F8/Block Operations/Enhance. What options are there in the other situations to make Q&A print bold or enhanced? Will printer control codes work from the Print Options screen on an individual record? I use the HP LaserJet (portrait) in the Install Printer Type. I've never changed fonts in Q&A 4.0. I've actually never installed them and I'd have to see if they are on the original disks.

Jerry

(Tom Marcellus answers)

Forget "fonts"—the issue is not about them.

Be sure the printer isn't short on toner.

For printing records from the screen with F2/F10, add the decimal code *27,040,115,051,066* to the Printer Control Codes line at the Print Options screen. You can optionally put this code on the Printer Control Codes line in the Print Options screen at the *File/Print/Set Global Options/Print Options* screens to make it stick for single and/or multiple record printing.

For Reports, you can enhance your Column/Sort Spec codes with bold (Shift-F6/Bold). Enhance them all and they will all print in bold. This is all covered in the Q&A manual.

For reports containing *no* enhancements whatsoever, you can add the <-(s3B escape code to the Printer Control Codes line at the Print Options screen. (You can also try the equivalent decimal code mentioned above.) You type the "<-" left arrow escape code in Q&A by pressing Alt-F10 then holding down the Alt key while pressing 27 on the numeric keypad.

You should be able to enhance your Print Specs in a similar fashion to get bolder output.

There may be adjustments you can make to the printer itself (or to the printer's properties in Windows) to dump more toner on the page. (Sometimes a lower print resolution setting will darken the output.) You may be able to set your printer's default font to, say, Courier Bold, so that everything that prints from it prints bolder. See your printer manual or talk to HP.

There are other options, but they are beyond the scope of this column.

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.