

Re: Dynamic Report

Source:

<http://www.tech-archive.net/Archive/Access/microsoft.public.access.reports/2006-02/msg00335.html>

- *From:* "Tom Ellison" <tellison@xxxxxxxxxxxx>
 - *Date:* Thu, 9 Feb 2006 00:18:41 -0600
-

Dear Duane:

Motivation! Good one! And you probably know what is the prize I'm after. Such a greedy guy I am!

So, in this HTML driven solution, we create such tags embedded in our report, then open the report in, what, IE, and cause it to be printed there? Hmm. I can see it happening.

But, one of the steps necessary is to have it dynamically select a font size to prorate what is essential in my thinking. I want it to prorate the font to affect the width only, no changes vertically. Of course, I know that characters also get taller or shorter as you change font size. But the height of the text box would not be changed. An essential feature of my plan is to keep the pagination unchanged for that assigned by Access. Otherwise, such features as Keep Together will be a problem. The decisions on pagination must be done in Access, and must remain valid through to the finished product. It has to print as originally formatted, but with some new capacities to adjust column widths and fonts to affect horizontal formatting.

My concept (yesterday, after we began our exchange) was to use some programming inside Word to affect these things. There would be some customization done there. Word handles VBA, and I could create such VBA to get the job done (I hope!). In my concept, that was an integral feature toward what I want done.

Already I'm wondering if there's a way to detect, within Word, that it has been invoked from Access to do this particular task, and to invoke the programming I provide to Word to perform the task. That is, the task of changing column widths and font sizes in creating templates, then assigning those templates to the sections of the text. Sounds like some research is in order, and a trip to the Word newsgroups.

I'm not so accomplished with what can be done using HTML in this respect. Perhaps that's why I'm leaning toward a solution within the Office Suite. At least here I've had some experience with what can be done.

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I thank you for your extremely stimulating responses. I'm actually quite excited by some of the inspiration you've caused. It really helps that we've met previously and shared some experiences technically. The fact that I know you and respect your opinions really releases the juices toward such inspiration. I can hardly wait to have the time to begin trying some of this. I just hope it doesn't detract too much from my posting in the newsgroups. But I'm very primed to try it.

I think I'll go whip up a batch of peanut butter cookies, then try tackling some of this. Brain food, you know! Sounds like an all-nighter!

Tom Ellison

"Duane Hookom" <duanehookom@xxxxxxxxxxxxxxxxxxxx> wrote in message news:O7aLFmTLGHA.2320@xxxxxxxxxxxxxxxxxxxxxxxx

Tom,

You are the one who seems to have the ideas and motivation lately. Here's another one for you. Rather than create an Access-Access or Access-Excel or Excel-Word solution, consider Access-HTML. You theorized about maximum column widths and lots of other stuff. Typical HTML tables resize based on the data contained in the <td> and <th> tags. You can use style sheets, vbscript,.....Have fun...

—
Duane Hookom
MS Access MVP

"Tom Ellison" <tellison@xxxxxxxxxxxx> wrote in message [news:OOW\\$fJPLGHA.648@xxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:OOW$fJPLGHA.648@xxxxxxxxxxxxxxxxxxxxxxxx)

Dear Duane:

Excel has a printing option to prorate the page. That's something missing from Access. Sorely missed!

Your suggestion is brilliant, of course. The capacity in Excel, while it doesn't do just what I want, it is useful and was an inspiration in what I do now. An "Export to Excel" option is available on many of my reports, but this was never a primary reason for that.

The problem with Excel reports is that, you cannot size subsections of a report (sub-reports) independently of the columns of the rest of the report. (Am I correct in this? The column widths you select extend the entire length of a worksheet.) It would be terrific if you could have multiple sub-report sections in Excel, each with their own set of column widths. Sounds like a nifty enhancement.

Actually, you can create this effect in Word. You set up templates for

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various sections in a document, and apply them by name. A template can apply to repeated portions of a document. If you change the template, every section of the document to which it applies is changed. That's the way to do this. But I have no idea how to set up such templates as an automated feature of a report, and embed the templates within the report. Otherwise, an export to Word could be the perfect solution for this. I would then learn to program Word to adjust font and column widths so everything fits!

Now you've gone and done it! You've got me thinking again (I believe it has been quite a while since I've done this!)

OK, I could embed a text "marker" in my report, which I could search in Word, and replace with the "change to template" function. This could be the first step in a series of steps programmed in Word to do everything I need! Word could handle the sizing (font and column widths) and this could be programmed. Perhaps the whole thing could be automated. Access sends the report to Word, and initiates the custom processing there, and Word prints the document and closes. I knew there was a reason Office is a suite of connected programs. I think I'm going to look into this!

You see how brilliant you are, Duane? How do you come up with these gems?

Well, that's a beauty of the RFC. Get the juices flowing. Now I just need to increase my Word programming capacities. Anyone have an idea whether the capabilities exist there? I expect they do!

Tom Ellison

"Duane Hookom" <duanehookom@xxxxxxxxxxxxxxxxxxxx> wrote in message

news:uqlmoiMLGHA.3260@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

Tom,
Sounds like you have given this a lot of thought and time. To give users dynamic reports, I generally allow them to create dynamic queries and display the results in Excel. Most users feel fairly comfortable resizing and printing "to fit". This solution is not as slick as yours but it offers a good deal of functionality and flexibility.

—
Duane Hookom
MS Access MVP

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"Tom Ellison" <tellison@xxxxxxxxxxxx> wrote in message
news:eL9L1AJLGHA.3460@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

I have the concept of a dynamic report in mind. I have done some of this in the past, and have what I believe to be a "proof of concept" at this point.

The Problem

You can design a report to have no problems. Years ago in mono-spaced fonts (10, 12, or 16 characters to the inch, no matter which characters, all the same with) you could place columns across a page fearlessly. But the true-type font has changed all this.

Don't get me wrong. As a rule, it works very well. It looks great.

But, if you're going to represent a 20 character wide column of data on a piece of paper (where you can't scroll to see the rest of the column if it doesn't fit) and you're going to guarantee it will always fit by making the column wide enough, you're in for a problem.

In a text column, place the test data to see this work. For our hypothetical 20 character column, put in the character W 20 times. Now just make the control for the column wide enough to hold all of that.

In order to get a pretty good report on across single sheet of paper, you may end up with a font size of 3 or 4. With a microscope, and given a very high resolution printer, someone may actual read this.

The next thing is that, given more usual data, you're going to have a situation where the printed page has tiny letters and columns of print that fill only about 1/4 of the width of the

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columns. I've had users tell me I leave too much space and use too small a font, and I've never come close to making things wide enough for 20 W's.

One of my design tools has been a dll function that gives you the width of any text, given font and font size (plus whether italic, bold, etc.). I have used this in queries to find the maximum width of the existing data. Leave an additional 10, 20, or 25% just in case, and you have a fairly happy medium, with room for even longer text values that may come later.

Now, we commonly prorate our screens so everything will fit no matter what screen resolution the user picks. This makes the same application run on many computers at many resolutions and still look good. I can't live without that one!

Why not apply the same thing to reports. Here's what I propose, and have partly accomplished:

Find the maximum width to display each column (this is a query using the dll function giving width). Add up all the columns, adding space between the columns as desired. Prorate the font size up or down so it will fit across the page. At this new font size, find the width to display each column at the newly calculated font size. Size and relocate each column, spacing them as required. Set the font for these controls.

I have to do the same with column headings (wouldn't look any good if you don't, eh?). I associate column headings with the controls with the data by tags. I also use tags to identify the horizontal lines to draw across the page – these must be located

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correctly as well. This can be a double tag, keying the line to the position of the left edge of the left most data column under which it is drawn, and the data column to the right edge of which determines where it ends.

I've pretty much got this working. If you have totals, you will need a bit of extra room on those columns. You can use the factor of 10, 20, or 30% I suggested to allow for that. It could also be done by setting up a database in which, for each report, additional parameters are assigned. Say, for column tagged "XY" add an extra 10%. Indeed, a database of such report design parameters seems exactly what is needed.

Now, I know you would get bloat changing a report all the time like this. That is, you would if you saved the design changes. But they don't need to be saved! You can override saving design changes when the report closes, and there's no change, and no bloat.

I post this to be open for comments.

My own comment is that this would best be done page by page, rather than the whole report. The columns on one page would not then line up with the columns on the next page, because the data in different columns is different on one page from the next. Each page would have its own font size, for that matter. Pretty neat! And, while you're at it, dream on! But some time, somewhere, this is going to become the standard for database tools! (My prediction.) When it does, everything else is obsolete!

Tom Ellison

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