

ACCESS <<<<<<<

By Patricia Cox

Master Budget Project: Automate the Direct Materials Budget Report

>>> Creating the Direct Materials Budget Report involved a significant amount of detail work. Now it's time to string it all together into a macro to automate the process. We'll also add a button to the Reports Menu to run the macro.

Clean Up

Before we begin the automation process, remember to go back into the queries and add the Sort Order field if you haven't already done so. Last month, we added a Sort Order field in the Direct Materials Budget table. Now we need to make sure that the Make Table Direct Materials Budget query adds a place for the values to be stored and that all the append queries include Sort Order when they run.

Because we already created the queries and found a need for a separate field for a Sort Order, we need to edit each of the queries to insert a column for Sort Order. I began with the make table query, adding "Sort Order:1" in a new field at the beginning of the Query by Design grid (see Figure 1). Then I ran the query to make the new table with the Sort Order column. I

then worked my way through the append queries in the order I want them to appear on the report, adding a Sort Order field to each and increasing the number by one each time. See Table 1 for the queries and their Sort Orders.

The Navigation Pane

When you work on a long-term project with breaks in between, sometimes it can be a challenge to locate the various queries and get them into the right order. One thing you can do is number them as

click the down arrow in the Navigation Pane header and choose the order in which objects are displayed. Selecting Created Date allows you to see the objects by the date you created them. Use Sort By, Sort Descending to show the most recently created items first.

Create the Report Macro

Now it's time to create the macro that will carry out all these steps in one click. Go to the Create tab on the ribbon and click the Macro icon. A macro design window will open. Close the Action Catalog because we won't be using it. On the ribbon, click the Show All Actions icon. In the macro design window, there's a green plus sign next to a dropdown box. In the box, either type "SetWarnings" or select it from the dropdown list. The Warnings On will be set to No. We start with this step because we want to keep the append messages from displaying on the screen. We'll turn the warnings back on at the end of the macro so that we get warnings when we create new append queries.

From the Navigation Pane, click and

Figure 1. Adding Sort Order to the Queries

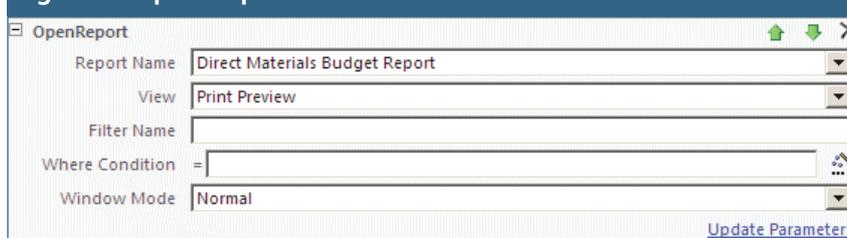
Field:	Sort Order: 1	Category: Required F
Table:		
Sort:		
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:		
or:		

you name them. If you haven't done that, however, there are a few things you can do with the Navigation Pane to locate objects you have created. One is to right-click the header at the top of the Navigation Pane and select View By, Details. This shows the date that objects were created and modified. You also can

Table 1. Query Sort Order

Query	Sort Order
Make Table Direct Materials Budget	1
Append Product Materials to Direct Materials Budget	2
Append Totals to Direct Materials Budget	3
Append Desired Ending Parts Inventory	4
Append Total Needs to Direct Materials Budget	5
Append Less Beginning Inventory to Direct Materials Budget	6
Append Direct Materials to be Purchased	7
Append Cost per Unit of Direct Materials	8
Append Cost of Direct Materials to Be Purchased	9

Figure 2. Open Report in Print Preview



drag the Make Table Direct Materials Budget query into the macro design. This will add

an OpenQuery action to the macro. Repeat the process for the other queries in the same order as listed for the Sort Order. The only difference is to include the Update First Period Less Beginning Inventory query after Append Less Beginning Inventory to Direct Materials Budget (6) and before Append Direct Materials to be Purchased (7).

If you sorted objects in the Navigation Pane by Date Created with a descending sort order, the queries should show up in reverse order. Simply work your way up the list one at a time.

When you're done adding the queries, find the Direct Materials Budget Report and drag that into the macro design. Change the View to Print Preview (see Figure 2). This will allow you to preview the report before you print it. Once you're completely comfortable with the process, you can change the View to Print if that works better for you. Now add another SetWarnings action, this time with Warnings On set to Yes.

Save the macro and name it "Gather Data and Preview Direct Materials Report." Run the macro to test it. Make sure you included all the queries in the correct order and that the final report is created.

Add a Button to the Report Menu

In the past, we have added buttons to the Report Menu to preview a report. Now we'll add a button to run the macro. From a user's perspective, the buttons won't look any different.

Open the Report Menu form in Design view. Select the Button Control (it looks like a rectangle with "xxx" in it) and draw a button on the design. This will open the Command Button Wizard. From the Category list, select Miscellaneous. From Actions, select Run Macro. Click Next. Select the Gather Data and Preview Direct Materials Report macro and click Next. Replace the words "Run Macro" with "Direct Materials Report."

Click Finish. Use the format painter to copy the text format from one of the other buttons and

resize it to match the others.

Best Practice

This month we added Sort Order fields to our queries. A best practice is to only add additional sort order fields if the other fields don't facilitate the sorting you need. As always, test your macros and buttons to make sure they meet your expectations before you move on.

Now that we've finally created the Direct Materials Report, next month we'll work on the Schedule of Cash Payments and Direct Labor Report. **SF**

Patricia Cox has taught Excel and Access to management accounting students and other college majors and has consulted with local area businesses to create database reporting systems since 1998. She is also a member of IMA's Greater Milwaukee Chapter. To send Patricia a question to address in the Access column, e-mail her at kathrynmann@tds.net.