Transferring Data With Spreadsheets

by Scott Shelley

The manuals that come with many computer programs leave you with the impression that transferring data from one application to another is amazingly simple — but it's not. Programs from different software companies might be able to "talk" to each other, but only if the data is set up exactly the way each program expects. I experienced this problem firsthand when trying to automate the chore of manually entering budgets into QuickBooks (for job costing) from a printout of my WinEst estimate.

Figure 1. The first step in using a spreadsheet to transfer data from an estimate to QuickBooks is to save a QuickBooks budget as a text (.TXT) file. When you open the file in a spreadsheet, as shown here, you see the column headings, which you can then use to set up your estimating software.

Job Cost Code	Job Cost Name	Labor Total	Material Total	Sub Total	Equip Total	Other Total	Total Unit Price	Total
1	General Conditions	7200						7200
1.5	Constr. Facilities & Temp Constr.			1940				1940
2.05	Demolition	1021.5		960				1981.5
2.2	Earthwork	617.5		3100	129.38			3746.88
3.1	Concrete Formwork	798.95	38.88					835.83
3.2	Concrete Reinforcement	225	157.5					382.5
3.3	Concrete Material & Placing	201.67	1711.11	180				2092.78
3.35	Concrete Finishing	53.25						53.25
5.05	Metal Fastening	56.25	53					110.25
6.05	Fasteners and Adhesives	1466	1236.23					2690.23
6.1	Rough Carpentry	6899.85	13149.97					19849.82
6.13	Heavy Timber Construction	286.86	201.49					487.35
6.17	Prefabricated Structural Wood	411	432.5		90			933.5
6.2	Finish Carpentry	3851.76	4781.51					8633.27
6.4	Architectural Woodwork	347.67	510	2120				2977.67
7.1	Waterproofing	390	391.73					781.73
7.2	Insulation	169	231	1992				2391
7.3	Shingles & Roofing Tiles			7310				7310
7.46	Siding	3010.56	12038					15048.56
8.2	Wood and Plastic Doors	3720						3720
8.3	Special Doors		5203	1				5204
8.6	Wood & Plastic Windows		5824	1				5825
9.25	Gypsum Board			12346				12346
9.3	Tile		4017	6169				10486
10.3	Fireplaces and Stoves			2814.53				2814.53
10.8	Toilet and Bath Accessories	603.41	1029					1632.41
11.46	Residential Equipment	435						435
12.3	Manufactured Casework	2072.88	250					2322.88
15.4	Plumbing			19500				19500

Figure 2. To see a list of the raw estimating data that would be incorporated into a QuickBooks budget, the author "printed" a WinEst report to a text file, then opened the file in a second Quattro Pro spreadsheet, part of which is shown here.

Enter my trusty spreadsheet, which I used to create a conduit between the other two programs. I use Borland Quattro Pro as my spreadsheet, but Microsoft Excel or Lotus 1-2-3 will do the same job. The only requirement of the spreadsheet program is that it have the ability to record advanced macros (more on macros later). The solution involved several steps, but the results were just what I was looking for.

Arranging Data

First, I had to figure out how QuickBooks wanted my estimating information arranged so it could be imported into a budget by "class." I did this by creating an export budget file in QuickBooks (File | Export | Budgets), saving the file as plain text to the Win95 desktop or to a project folder, and then opening it in Quattro Pro. QuickBooks will name the file with an .IFF extension, which you might need to change to .TXT (I named the file JCEXP.TXT for "Job Cost Export Text"). The new file provided the column headings QuickBooks needed to "see" to import a job budget (see Figure 1). I also checked this file to make sure the classes in QuickBooks matched the format of WinEst, which in my case was Construction Specifications Institute (CSI) format.

Next, I set up a report in WinEst that showed all of the information I needed to create a budget in QuickBooks. WinEst allows you to "print" the report to the hard drive as a text file, which can then be opened in the spreadsheet (Figure 2).

Finally, after comparing printouts of the estimating data and QuickBooks budget, I set up two Quattro Pro spreadsheets to act as a filter. Using the WinEst text file, I search and sort the data, then move it from one sheet to the other. Once I have the data organized exactly the way QuickBooks

Figure 4. After running the macro, this is what the WinEst file looks like in Quattro Pro. After saving the spreadsheet as a text file, the author imports it into QuickBooks.

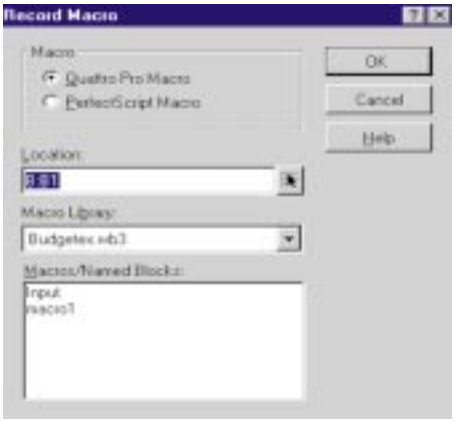

Figure 3. Clicking the Record Macro button in your spreadsheet is a lot like pushing the red button on your tape recorder. Instead of capturing sound, however, the macro records keystrokes and mouse movements that can be "played back" later.

expects to find it, I save it as a text file that QuickBooks can import.

Use a Macro

After running through the steps manually a few times to test it, I automated the process by creating a spreadsheet macro. A macro is a series of keystrokes or mouse clicks and other computer commands you would normally perform manually. Once "recorded," the macro can be "played" over and over again, executing the commands automatically one after the other. To create a macro, you run through the steps while the "recorder" is on (Figure 3) and then assign a keystroke combination to trigger it.

Using this macro, the whole process of sorting and transferring my data now takes two minutes instead of the hour or more I used to spend doing it by hand. I've also built in several formulas that work behind the scenes to combine some WinEst subheadings into a single heading. The macro will work without these formulas, however, the final budget list will be longer. The sorted spreadsheet ready for importing into QuickBooks is shown in Figure 4.

Spreadsheets as Middleware

A spreadsheet can also be used as a go-between for tabulating man-hours by category in QuickBooks, for example, then plugging the result into a job schedule in Microsoft Project. Another example would be filtering a WinEst estimate and exporting only the parts you want your client to see to your word processor for a printed proposal.

Compatibility between unlike programs is still a pipe dream for most small contractors, but creative use of the trusty spreadsheet as a go-between or "middleware" makes cooperation possible. That can save you time and provide you better information with which to run your company.

Scott Shelley *owns Scott C. Shelley Construction, a remodeling company in Petaluma, Calif.*