

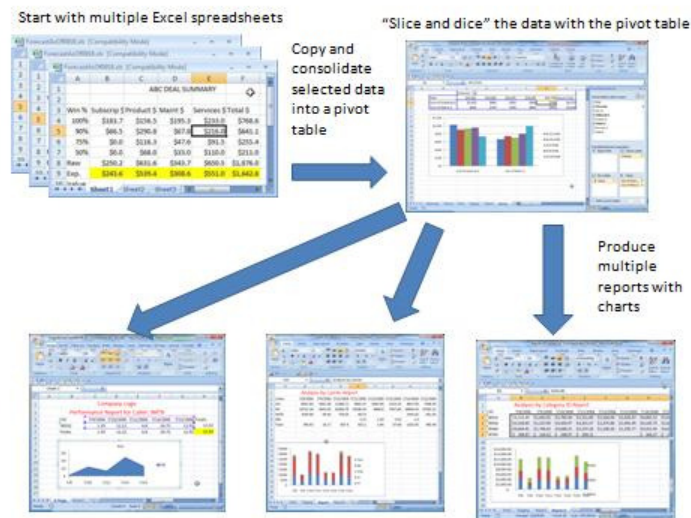
Lesson #4:

How to generate multiple Excel reports that show different views from a pivot table

Problem:

You need to regularly “slice-and-dice” spreadsheet data, and publish multiple Excel spreadsheet reports, each of which is based on a different view of the data.

In net, you want to accomplish this:



As we saw in earlier lessons, Excel pivot tables allow you to do the slice-and-dice analysis, so you can use that to produce all the views you need. Unfortunately, a pivot table shows only one view of the data at any time. How can you produce all the different reports you have to make, from just one pivot table?

You could work around this limitation by creating one pivot table for each view, and distributing all those pivot tables. But your audience doesn't want to have to work with pivot tables. They want polished reports they only have to read.

That means you still have the problem of transferring the data from the pivot tables to the different reports. As we saw in the previous lesson, it is very difficult to manually transfer data from those pivot tables to a regular Excel worksheet. You will have to re-format the report worksheet extensively, rework the charts, and review the formulas. You will have to do that for every single report.

Solution:

You can do this manually with plain Excel. However, each additional report would be just as hard to make as the first. The manual method for preparing each report is described in

<http://www.xcelential.com/lessons/as/Lesson3.pdf>.

A more practical alternative is to use Excel VBA to write a program that automates the process for a specific set of reports. The kind of coding required is outside the scope of this lesson. All we can say is that it will require significant programming skills and time to implement such a program.

Alternatively, you can use Xcelential Pro together with Excel. As we saw in the previous lesson, Xcelential Pro automates the process of getting pivot-table results into a regular Excel worksheet, while preserving/updating design elements, formulas, and charts.

What we will see in this lesson is that Xcelential Pro has the unique ability to “memorize” different pivot-table views of data, and to map the data from each one to a separate Excel worksheet and file. This memory feature makes it possible to “train” Xcelential Pro to generate a number of reports from a single dataset, without any programming or formulas, at all.

Lesson:

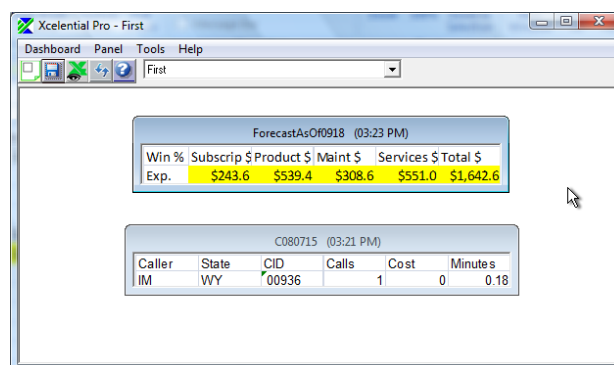
This lesson will focus on how to add new pivot table views and reports to an existing Xcelential “staging workbook.” An Xcelential “staging workbook” is the Excel workbook in which the consolidated data and pivot table used to generate reports are stored.

As you will see, you will be working in Excel for most of the lesson. We will work with the pivot table, as well as with the Excel report.

To minimize the time required to go through the lesson, we assume that you completed the previous lesson. If you have not yet done so, please [click here to download and follow it](#).

Let’s begin from the end of Lesson 3. These are the steps you need to perform, in order to associate an additional pivot table view with a new Excel report worksheet, to an Xcelential dashboard panel that already has an associated pivot table and report.

1. Start Xcelential. If you finished Lesson 3, you will see a dashboard that looks like this:

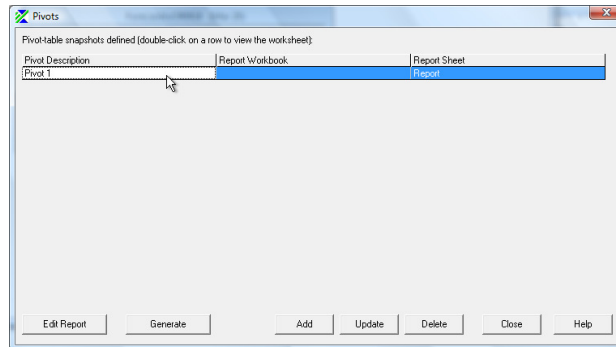


The screenshot shows the Xcelential Pro interface with a menu bar (Dashboard, Panel, Tools, Help) and a toolbar. Two data reports are displayed:

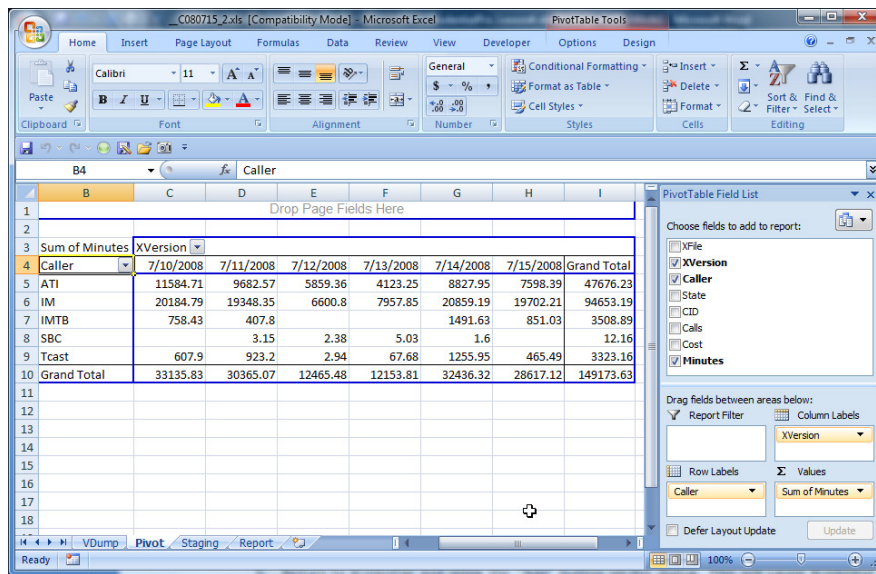
ForecastAsOf0918 (03:23 PM)					
Win %	Subscrip	Product \$	Maint \$	Services \$	Total \$
Exp.	\$243.6	\$539.4	\$308.6	\$551.0	\$1,642.6

C080715 (03:21 PM)					
Caller	State	CID	Calls	Cost	Minutes
IM	WY	00936	1	0	0.18

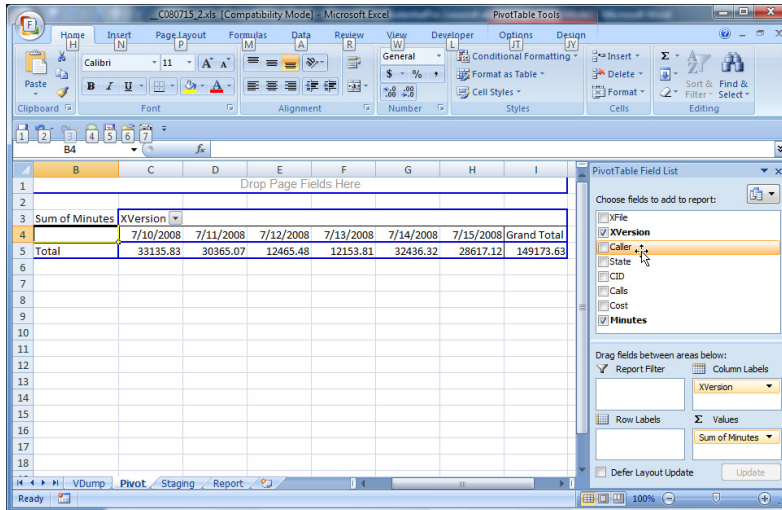
- Right-click on the panel with the Campaigns data (the lower panel in the illustration, above example), and select the “Edit Pivots” option. This screen will appear:



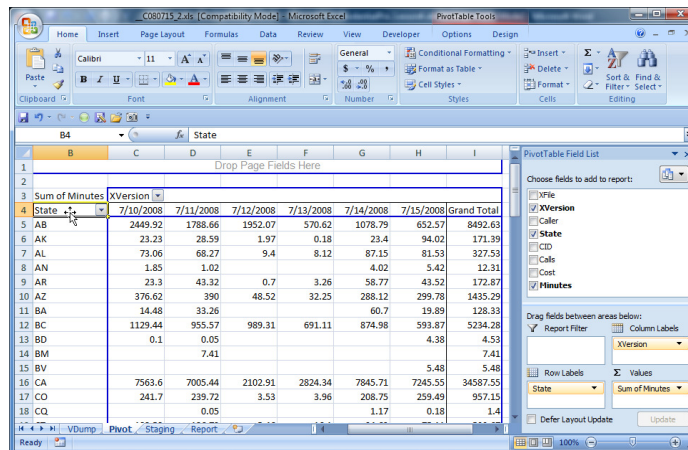
- Double-click on the first row of the grid that appears in the “Pivots” dialog. This will bring up the Excel workbook with the pivot table showing, like this:



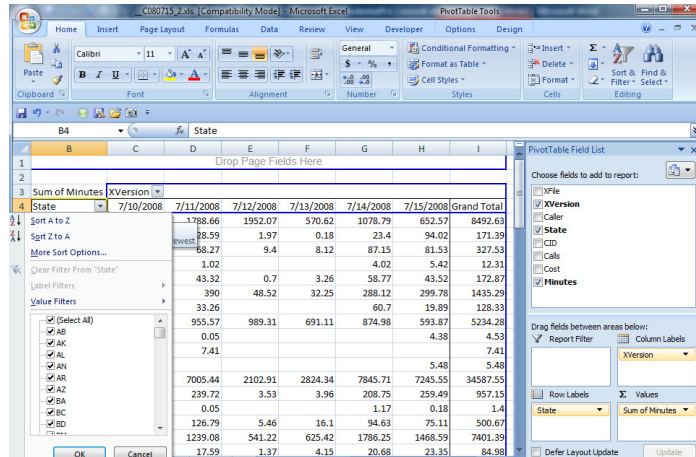
- If the list of fields (on the right, in the image above) is not showing, click anywhere inside the pivot table to bring up the list. Let’s play with the pivot table a bit. Drag the cell containing the field named “Caller” (that is cell “B4” in the image above) to the field list. That will leave the pivot table looking like this:



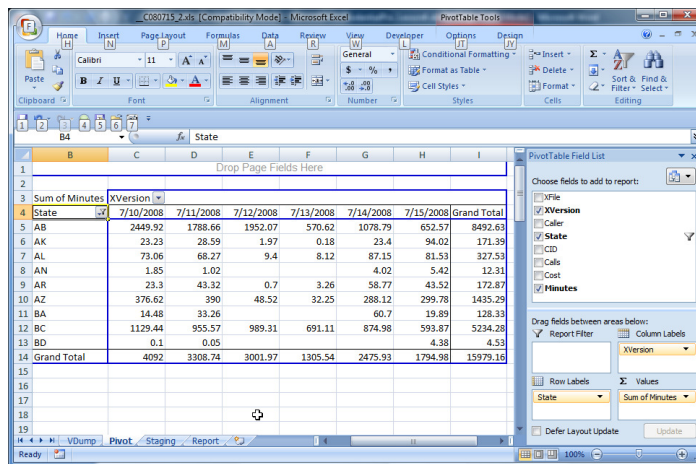
- Now, select the field named “State” from the pivot field list (the list on the right side of the image). Drag it to the cell that the “Caller” field occupied (cell “B4”). The effect is to change the data, so that the pivot table shows subtotals by State, rather than by Caller. The worksheet will now look like this:



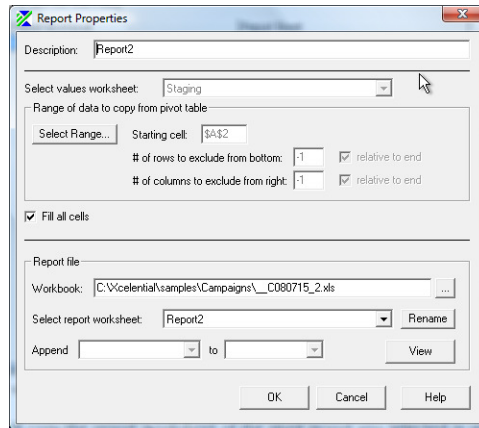
- There are a huge number of states. Let’s trim the data a little bit. Click on the drop-down arrow in the “State” field (cell B4). The list of values will appear underneath the field, like this:



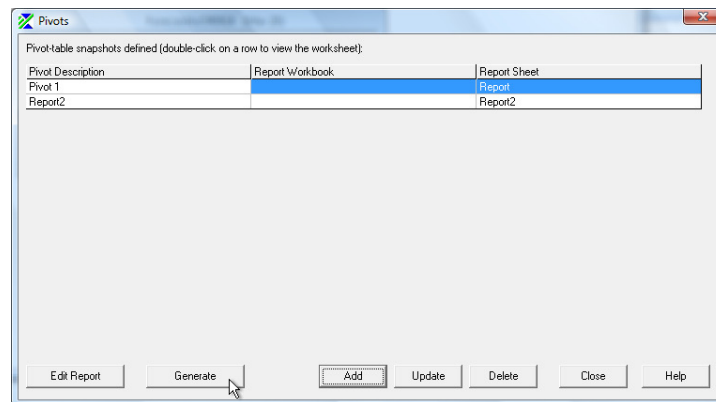
- Uncheck the box labeled "Select All". Then, proceed to check a dozen or so of the states, and click "OK." In this lesson, we are just playing with the data. In your real work, you may have to do more with the pivot table. After selecting a number of states in one session, we ended up with the pivot table looking like this:



- You can do even more with the pivot table in Excel. But that was not the point of the lesson, so let's **save the workbook**, and continue with Xcelential.
- Return to Xcelential and press the "Add" button on the "Pivots" dialog, which is still open. This will cause Xcelential to "memorize" the pivot table's settings. It will then ask you whether you want it to create a default report for the new pivot-table view. For this lesson, just click "Yes" (we will see what happens if you say "No," in the next lesson).
- Xcelential will copy the report worksheet of the pivot report you selected in step #3 of this lesson. It will assign that default report to the new pivot-table view.
- The "report properties" dialog will appear. We will cover what all those properties are for, in the next lesson. For now, the default values are good, so just click "Ok".



12. We will be back in the “Pivots” dialog that opened in Step #3. However, this time, we see 2 rows of reports listed. That confirms that we added a second report. Now, let’s see the result of our work. Press the button labeled “generate.”



13. This will cause Xcelential to generate the entire workbook, with both reports. You should now see 2 report worksheets in that workbook. The second one will contain the data broken down by State, while the first one still shows the data broken down by Caller.

14. Edit the second report worksheet in Excel to look the way you want. Then **Save the workbook**. Next time you generate the reports, the resulting report will look the way you set it up.

You can continue to add more pivot table views and reports, if you wish. Creating multiple reports manually requires the same amount of effort per report (i.e., your effort increases in proportion to the quantity of the reports). In contrast, the amount of your effort required to generate reports with Xcelential is the same, no matter how many reports are generated.

You can also get new data to try out the reports. The process is the same, regardless of the number of reports that have been defined for Xcelential to generate:

1. Start Xcelential and go to the dashboard where the panel from the spreadsheets with source data is defined..
2. Right-click on the panel, and select “Versions”.

3. Select a set of files from the Versions form. Check the “include hidden data” checkbox, if applicable. Then press “merge”.
4. In the next form, click “OK”.

Result/Conclusion:

Xcelential Pro automates the process of generating multiple custom-formatted reports from one set of spreadsheet data files. Each report will include the data from a pivot table view that Xcelential Pro memorizes.

Note that Xcelential Pro does this, on top of the features we saw in the previous lessons. We can sum up what Xcelential Pro does, based on the first 4 lessons:

1. It creates an analysis spreadsheet by copying the template you selected.
2. It opens all the source spreadsheet files you selected from a list it presents to you.
3. It locates the data you want consolidated in each file.
4. It copies the collected data to the file it created.
5. It creates the pivot table, and starts an initial analysis.
6. It uses an Excel worksheet you designate as a template for the desired output.
7. It moves the data from the pivot table to the templated Excel worksheet, while preserving the integrity of the design elements, formulas, and charts of the target worksheet, even if the number of rows and columns has changed.
8. It repeats steps 5 through 7 for each additional view of the data that it “memorized” pivot-table settings for.
9. It generates all defined reports in each run.

On a final note, you can also use the following outputs of Xcelential, in addition to the report worksheet:

1. Use the worksheet with the consolidated data (for example, to upload the data to a database).
2. Use the pivot table in the analysis workbook it created.

Was this lesson helpful? Feel free to enter comments and suggestions in our forum (<http://www.excelential.com/bb/viewtopic.php?f=7&t=377>)