



# Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

LIBREOFFICE SERIES SPECIAL EDITION VOLUME 2

LIBREOFFICE SERIES  
SPECIAL EDITION



**LIBREOFFICE**  
Volume Two    Parts 8-16

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## Full Circle Magazine Specials



### About Full Circle

Full Circle is a free, independent, magazine dedicated to the Ubuntu family of Linux operating systems. Each month, it contains helpful how-to articles and reader-submitted stories.

Full Circle also features a companion podcast, the Full Circle Podcast which covers the magazine, along with other news of interest.

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### The LibreOffice series continues...

We continue our assembly of Elmer Perry's LibreOffice series in this, Volume 2.

Here is a straight reprint of the series '**Libre Office**', **Parts 8-16** from issues #53 through #63, which the observant among you will note is not an unbroken run. Fear not, you are missing nothing: Elmer took a couple of issues off.

Please bear in mind the original publication date; current versions of hardware and software may differ from those illustrated, so check your hardware and software versions before attempting to emulate the tutorials in these special editions. You may have later versions of software installed or available in your distributions' repositories.

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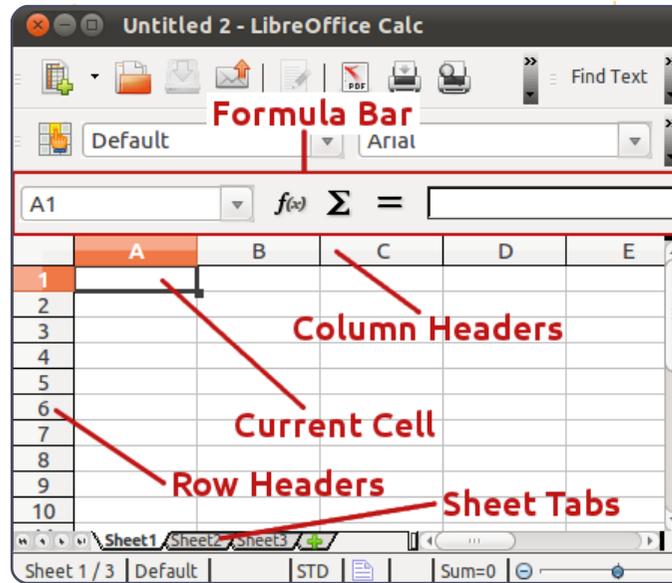
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**C**alc is the spreadsheet module of LibreOffice, which is compatible with Microsoft's Excel. We already saw one use for Calc when we created our poor man's database in my last article, but Calc is capable of more than just data collection. As the name implies, Calc can do calculations using a rich number of functions built into the program. This means we don't have to manually calculate the total of some column; we can insert a formula to add it up for us. Calc also allows you to do a "what if.." scenario to play with the numbers in your spreadsheet.

Before we get into building our budget spreadsheet, you need to know a few things about how a file, sometimes referred to as a workbook in Calc, works. Each file can contain several different spreadsheets. In a new workbook, you get three spreadsheets by default named sheet1, sheet2, and sheet3. They are listed on tabs at

the bottom of the window. Each spreadsheet consists of individual cells. You identify the cells by their column letter and row number. For example, the first cell in the upper left hand corner is A1, the first column, first row. Each spreadsheet is capable of having 1,024 columns and 1,048,576 rows.



The layout of the Calc window is a little different than the Writer window. You still have a menu bar and formatting bar, but below the formatting bar, you have the formula bar. The formula bar is your friend when you work in Calc.

The leftmost box is the current cell name box. It tells you the currently selected cell or range of cells. The three buttons are the function wizard, the sum button, and function button. The text box is the input line. Use it to edit the contents of a cell.

At the top of your spreadsheet, you have the column headers (A, B, C...), and along the left hand side, you have the row headers (1, 2, 3...). The columns and rows are marked on the sheet by light gray lines. You will find this grid handy when you are laying out your spreadsheet.

You have several choices in the way you enter data into the cells. You can click on the cell and just start typing. When you have finished, press enter and you will move to the cell below. You can also click on a cell and enter your data in the input line of the formula bar. This method has a drawback, which I will explain in a minute, but sometimes, it is the

best method for editing the content of a cell. You can edit directly in the cell by double-clicking the cell. This puts you in cell edit mode. This mode is similar to editing in the formula bar.

To navigate within your spreadsheet, you can always grab the mouse and click on the cell you want. However, since often your hands are already at the keyboard, keyboard shortcuts work better. Tab moves you one cell to the right. Shift-Tab moves you one cell to the left. Enter moves you one cell down, and Shift-Enter moves you one cell up. While not in edit mode or not using the input line, the arrow keys move you in the direction of the arrow. The arrow keys are disabled for navigation while in the input line and in edit mode to allow you to move within your content.

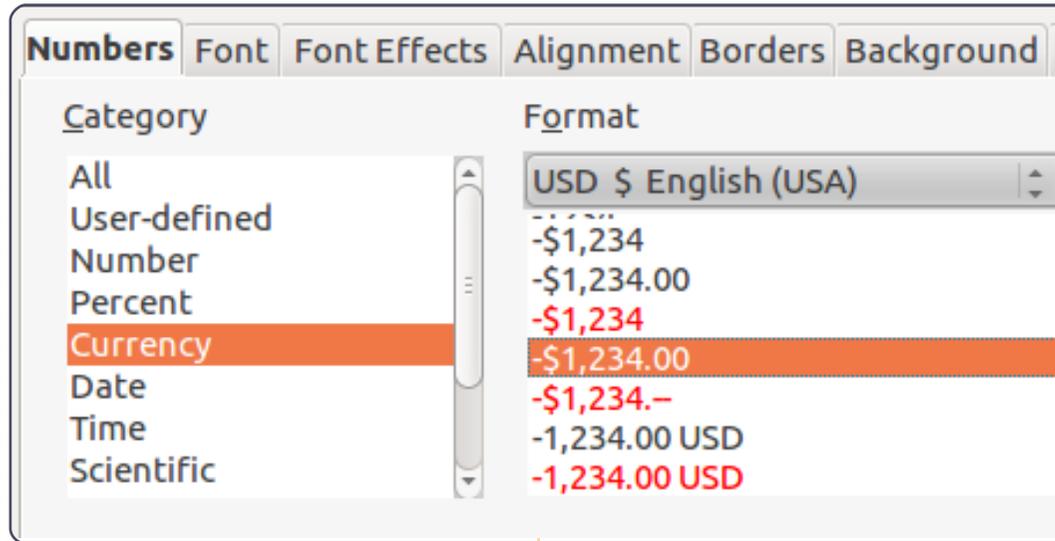
Now, with these tools on your belt, let's build the first section of our budget spreadsheet. Open a new Calc file. Click on the blank gray spot to the left of the column header and above the first row

header. This will select the entire sheet. In the formatting bar, set the font to a nice sans-serif font like Arial, and set the font size to 12pt. By doing this, we have set the default font and size for our entire sheet.

In cell A1, enter the text "Income for This Period," and press Enter. For now, don't worry if the text overruns the cell. We will fix that in a minute. On the second row of column A, type in "Sources". Down column A starting with row 3, type in the different types of income you have, e.g. Work, Freelancing, Bonus. I usually add a "Misc" for those things that don't fit into other categories, like winning the lottery and quitting your day job.

At this point, some of your income sources may overflow their

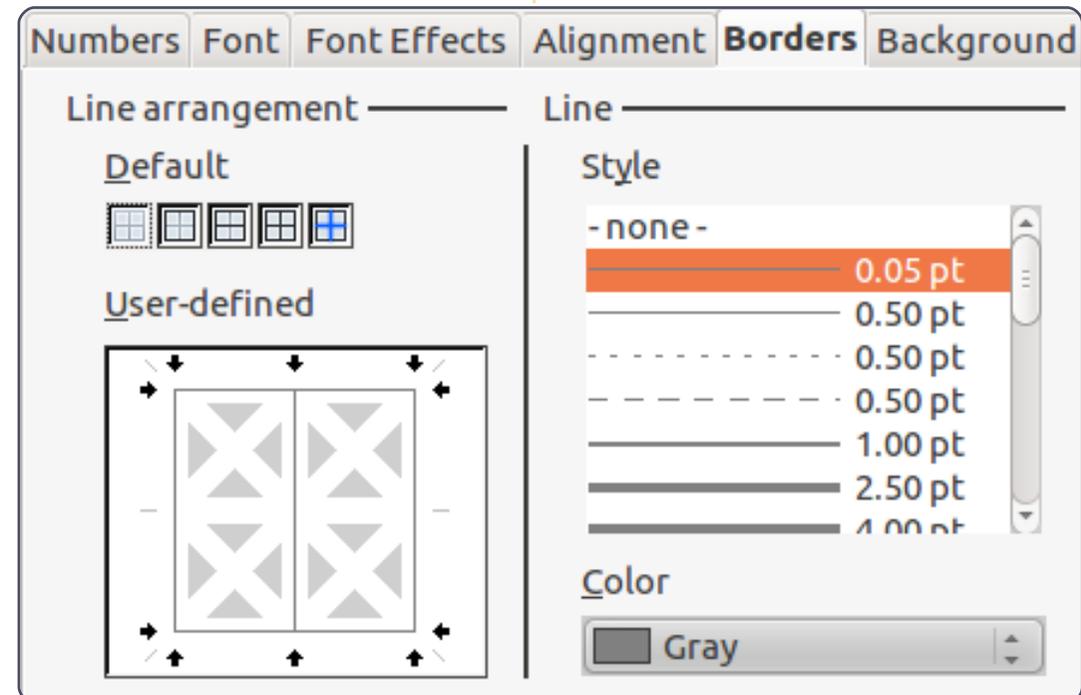
A7	A	B
1	Income this Period	
2	Sources	
3	Work	
4	Freelancing	
5	Bonus	



cells. We can adjust the width of the column by clicking between the cell headers for A and B and dragging. We are still not concerned with the cell A1. At this point, A1's overflow is okay, just make sure all your income sources fit in the column.

Move to cell B2. Type in "Amount". Press Enter. Down column B, enter an amount for each of the income sources. You will notice the default for numbers is just some unformatted numbers. Let's make them look like currency amounts. We will change them all at once. You can select all the numbered cells by click with the left mouse button and dragging until you have all the numbers highlighted. You can also click on

the first cell, hold down the Shift key, and click on the last one. With the keyboard, use Shift in combination with the arrow keys.



Format > Cells > Numbers. Select the Currency category. Above the format box, select the correct currency type for your country. Select a currency format from the format box. This is entirely up to you. Since you should never have a negative figure in your income cells, you don't need to worry too much about formats that deal with negative numbers.

Now, we will take care of A1 overflowing into B1. Since this text is a heading for the section, we want it to span across the width of the section. Cell Merge is the answer. Highlight cells A1 and B1,

and Format > Merge Cells > Merge and Center Cells. We will use merge cells a lot, and it should become one of your favorite formatting features.

Unfortunately, there is no keyboard shortcut. You can create one in Tools > Customize > Keyboard, but take care that you don't assign the keyboard shortcut to a common or predefined functionality.

Now, let's make it look like a header. Let's make the font bold, Format > Cells > Font tab. Select bold under Typeface. Let's put a border around it to make it stand out just a little more. Click on the Borders tab. Under Default, click the second box, Set All Four Borders. Leave the style at the default, but change the color to gray. Click OK.

With our Source and Amount headings, we want them to stand out as well, but they need to look a little different to distinguish them from the section header. Select the two cells with Source and Amount in them. Format > Cells > Font tab. Select bold again. Click on the Borders tab. This time we just want a border between the two cells. Click in the User-defined

box between the two gray boxes with a white X in them. You will see a line between the two. Change the color to gray. On the Alignment tab, change the alignment for horizontal to center and vertical to middle. On the Background tab, select a light blue (Blue 8) for the background color. Click OK.

For our income items, we could put a border around them, but that can be hard to read sometimes. Instead, let's highlight the even numbered rows. Start with the second item, highlight both the name and its amount. Format > Cells > Background tab. Select a light gray for the background. I used Gray 10%. Click OK. Repeat for all the even rows.

It would be nice to have a divider between the name and the amount and a border around the whole list. Click on the first name, hold the Shift key, and click on the last amount. This should highlight all the items and their amounts. Format > Cells > Border tab. Under Default select the second box, Set Outer Border Only. You will notice the User-defined box is different this time. There are four gray boxes with white X's in them. Click

between the top two boxes. This will give you a vertical line between the cells. If you click in the middle, it will create a vertical and horizontal line, which is not what we want. Change the color to gray and click OK.

	A	B	
1	<b>Income this Period</b>		
2	<b>Sources</b>	<b>Amount</b>	
3	Work	\$1,079.00	
4	Freelancing	\$200.00	
5	Bonus	\$50.00	
6	Misc	\$5,000.00	
7			

This completes the Income section of our spreadsheet. In the next article, we will continue with our budget spreadsheet by adding the Assets section. And we will begin looking at making our spreadsheet do some math for us using the Sum function.



**Elmer Perry** is a children's minister in Asheville, North Carolina whose hobbies include web design, programming, and writing. His website is [eeperry.wordpress.com](http://eeperry.wordpress.com).



In Part 8, we looked into formatting our spreadsheet cells to look a certain way, but the true power of Calc comes from its ability to calculate formulas using basic math and its built-in functions. Calc formulas are just what you think, mathematical expressions that use data to create a result. Calc functions give us predefined calculations and decision making. With just a little knowledge of formulas and functions, Calc becomes a powerful data analysis tool. When entering a formula or function into a cell, your formula or function must begin with the = (equals), - (minus), or + (positive) signs.

## Arithmetic Operators

Calc has five basic arithmetic operators:

- + (Plus) – add two numbers together, or as a sign for a number. Ex. =2+5 or +5
- (Minus) – subtract one number from another, or negate a number. Ex. =5-2 or -5
- \* (Asterisk) – multiplication. Ex. =2\*3

/ (Slash) – division. Ex. =21/7  
 ^ (Caret) – exponentiation. Ex. =5^2

Just like in real math, you can use parentheses to group expressions together to create more complicated formulas. For example, if you enter the equation =5-2\*3 in a cell, when you press the Enter key, you get -1 for the result. However, if you enter the equation =(5-2)\*3 in a cell, you get 9 for the result when you press the Enter key. This happens because Calc obeys the rules of precedence. In the first equation, the multiplication is done first, as per the rules, which gives us 5-6, which equals -1. In the second equation, we change the order of operation by using parentheses. In this case, 5-2 is calculated first because of the parentheses, giving us 3, and 3 x 3 is 9.

## Cell References

Hard coding our numbers doesn't make much sense. We could just use a calculator for that. To unleash the power of Calc's

calculating abilities, a reference to the data in our spreadsheet is needed. Cell references allows us to use the data within our spreadsheet in our calculations. Cells are referenced by the column letter and row number. The first cell of the first column is A1, the second cell of the first column is A2, the first cell of the second column is B1, the second cell of the second column is B2, etc. If we enter 5 in cell A1 and 6 in cell B1, we can enter the equation =A1+B1 in any other cell in the spreadsheet, and the result will show as 11.

In some functions, you will need to reference a range of cells rather than just individual cells. To reference a range of cells, start with the first cell in the range, followed by a colon (:), and the last cell in the range. To access the first 9 items in the B column, use B1:B9. To access the first 5 items in row 1 use A1:E1.

What if you need to reference multiple rows and columns? You just start with the first cell in the

block and end with the last cell in the block. For example, to reference all the cells in the first 5 columns and rows, you would use A1:E5.

## Mathematical Functions

If you need to sum a column of numbers, using basic mathematical operators could become laborious very quickly. Calc provides many functions for mathematic calculations, from finding the sum of given cells to trigonometry functions. These functions speed up your entry of formulas.

SUM() is the bread and butter of mathematical functions. This function is used so often, it has its own button on the function toolbar. SUM() can take up to 30 numbers or cell references between parentheses. You can also use range references with SUM(), which allows you to quickly total a column, row, or range of rows and columns. Multiple numbers, cell references, or range of cells are separated by a semicolon (;).

## SUM() Examples

=SUM(A1;C2;D5) – sum of the three cells

=SUM(2;A1;C5) – sum the number 2 with A1 and C5

=SUM(A1:A5) – sum the first five cells in column A

=SUM(A1:B5) – sum the first five cells in columns A and B

=SUM(A1:A5;C1:C5) – sum the first five cells in columns A and C

Calc provides many other mathematical functions. See the LibreOffice Calc documentation for a complete list, including the trigonometry functions.

## Conditional Calculations

Sometimes, you only want to perform a calculation when certain conditions are met. A good example of this is avoiding division by zero. If you try to divide-by-zero, you get an error. The conditional function IF() helps us accomplish this. The basic syntax of the IF() function is:

IF( Test; ThenValue; ElseValue)

So, if we want to divide A1 by B2, but we want to avoid the operation if B2 is zero, we could use the IF() function:

```
=IF(B2>0;A1/B2;"Can't div by zero")
```

This translates as "If B2 is greater than 0, divide A1 by B2; else, output the text 'Can't div by zero'."

Conditional calculations can help you avoid errors in your spreadsheets. Use them any time you think problems might pop up, like division-by-zero, or a number not being entered.

## Comparative Operators

Calc provides six comparative operators we can use in our test.

= (equal to)  
> (greater than)  
< (less than)  
>= (greater than or equal to)  
<= (less than or equal to)  
< > (not equal to)

In addition to the comparative operators, we can use the NOT() and AND() functions in our test.

The AND() function allows us to test more than one condition and NOT negates the condition. This time, let's make sure neither of the numbers equal 0:

```
=IF(AND(NOT(A1=0);NOT(B2=0));A1/B2;"Can't div by zero")
```

In this formula, we make sure that A1 is NOT zero AND B2 is NOT zero before we do our calculation. While this formula shows both the AND() and NOT() functions being used, a more practical formula would be:

```
=IF(AND(A1>0;B2>0);A1/B2;"Can't div by zero.")
```

We have only begun to scratch the surface of the possibilities using Calc's formulas and functions. Next time, we will take a look at some practical uses for some of these functions.



**Elmer Perry's** history of working, and programming, computers involves an Apple IIE, adding some Amiga, a generous helping of DOS and Windows, a dash of Unix, and blend well with Linux and Ubuntu.



The Ubuntu Podcast covers all the latest news and issues facing Ubuntu Linux users and Free Software fans in general. The show appeals to the newest user and the oldest coder. Our discussions cover the development of Ubuntu but aren't overly technical. We are lucky enough to have some great guests on the show, telling us first hand about the latest exciting developments they are working on, in a way that we can all understand! We also talk about the Ubuntu community and what it gets up to.

The show is presented by members of the UK's Ubuntu Linux community. Because it is covered by the Ubuntu Code of Conduct it is suitable for all.

The show is broadcast live every fortnight on a Tuesday evening (British time) and is available for download the following day.

[podcast.ubuntu-uk.org](http://podcast.ubuntu-uk.org)



In part 8 of this series, we began our work in Calc, and created and formatted an income section for a budget worksheet. Last month we began our discussion of functions and formulas. In this part, we will continue working on our budget worksheet, and use formulas and functions to do calculations in it.

## Setting Up the Assets Section

D	E	F	G
Assets			
Type	Beginning	Ending	
Period Income Total			
Checking Balance			
Savings Transfer			
Total Expendable			
Savings Balance			
Retirement Balance			
Gross Assets			

If you recall, we had set up a section that contained all of our income items in columns A and B. We will begin our Assets section in cell D1. Move to that cell and enter "Assets" in it. Select cells D1-G1, and merge and center the cells (Format > Merge Cells > Merge and

Center Cells). In cell D2, enter "Type". Merge and center this cell with E2. Enter "Beginning" and "Ending" in cells F2 and G2 respectively. In cell D3, enter "Period Income Total," and merge it with cell E3 (Format > Merge Cells > Merge Cells). In rows D4-D9, enter the following text in order: Checking Balance, Savings Transfer, Total Expendable, Savings Balance, Retirement Balance, Gross Assets. After entering the text in the cells, go back and merge these cells with their adjacent cell in column E (i.e. merge D4 with E4, D5 with E5...).

## Initial Calculations for Asset Section

In cell F1, we will place our first calculation using the SUM() function. For this cell we need to total the numbers of column B in our Income section. Enter this formula in cell F3:

**=SUM(B3:B6)**

This formula uses the SUM() function to total the numbers entered in cells B3, B4, B5, and B6.

If your Income section contains more or less income items, adjust the cell reference given to the SUM() function. If you pull out a calculator and add up the numbers, you will find you get the same number as the total calculated by LibreOffice Calc.

In cells F4 and F5, enter amounts for the Checking Balance and Savings Transfer. In cell F6, we will need to sum the three amounts above for the Total Expendable item, but this time, we will use a different method. Select cell F6

 and click on the sum button (shown left) in the formula toolbar. You will notice that LibreOffice automatically finds the three amounts above and creates a SUM() function formula with the range inside. Press Enter to accept the range.

D	E	F	G
Assets			
Type	Beginning	Ending	
Period Income Total	\$6,329.00		
Checking Balance	100		
Savings Transfer	50		
Total Expendable	\$6,479.00		
Savings Balance	1000		
Retirement Balance	5264		
Gross Assets	=SUM(F6:F8)		

Enter amounts for the Savings Balance and Retirement Balance in cells F7 and F8. Select cell F9, and click the sum button in the formula toolbar. Notice that, once again, Calc has selected the two numbers above it, but for an accurate total of the Gross Assets, we need to include the Total Expendable amount. Left click and drag to select the three cells. You should now see the corrected range in the SUM() function. Press Enter to accept.

D	E	F	G
Assets			
Type	Beginning	Ending	
Period Income Total	\$6,329.00		
Checking Balance	100		
Savings Transfer	50		
Total Expendable	\$6,479.00		
Savings Balance	1000		
Retirement Balance	5264		
Gross Assets	\$12,743.00		

## Setting Up the Expenses Section

We will come back to the Assets section to do some more calculations once we get the Expenses section set up. In cell A11, enter "Expenses". Merge and

center the cells A11-G11. In cell A12-E12, enter the following text in the cells: Type, Due, Amt Due, Amt Pay, and Notes. Merge and center the cells E12-G12. This becomes our header row for this section.

In cell A13, enter "Savings", and in cell A14 enter "Retirement". These two expenses will represent deposits into these two accounts, and we will use them in our final calculations in the Assets section. Beginning with cell A15, and going down the A column, enter other expenses like Food, Fuel, Mortgage, Phone, etc. In columns B and C, enter due dates and due amounts for all the items you entered in the Expenses section. Select a few of the items and put payment amounts in the D column. Merge the E, F, and G rows for each of the items.

## Formulas in the Expenses Section

In the cell below the last item (column A), enter "Total Expenses:", and merge it with column B on that row. Select the cell in column C for that row. Click the sum button in the formula

toolbar. Calc should select all the amounts in the Amt Due column. Press Enter. In the D column of the same row, type "Total Payments" and merge it with column E on the same row. Select column F of the same row and click the sum button on the formula toolbar. This time Calc jumps all the way up to the last amount in our Assets section, but this is not what we want. This happens because this is the first number Calc found in the column. Select the numbers in the Amt Pay column of the section to change the range. Press Enter.

## Final Calculations for the Asset Section

Going back to the Assets section, we will use some of the numbers in the Expenses section to do a few more calculations. Select cell G6. This is the total for our expendable income after all payments have been made. Enter the formula:

**=F6-F##**

where ## is the row number where the total payments is calculated.

For the ending balance on our

savings account, we need to take the beginning total, add the deposit, and subtract the transfer. If you put the Savings as your first item in the Expenses section, the formula will look like this:

**=F7+D13-F5**

For the Retirement ending balance, we just need to add the deposit. If you added Retirement as the second item in the Expenses section, the formula will be:

**=F8+D14**

Finally, we will make the final adjustment to the Gross Assets by

summing the three numbers in the G column. Select G9, and click the sum button in the formula toolbar. Calc should select the three numbers

we need. Press Enter.

Our budget spreadsheet is now complete, but it doesn't look very pretty. Next time, we will format our spreadsheet using styles.



**Elmer Perry's** history of working, and programming, computers involves an Apple IIE, adding some Amiga, a generous helping of DOS and Windows, a dash of Unix, and blend well with Linux and Ubuntu.

	A	B	C	D	E	F	G
1	Income this Period			Assets			
2	Sources	Amount		Type	Beginning	Ending	
3	Work	\$1,079.00		Period Income Total	\$6,329.00		
4	Freelancing	\$200.00		Checking Balance	100		
5	Bonus	\$50.00		Savings Transfer	50		
6	Misc	\$5,000.00		Total Expendable	\$6,479.00	\$6,069.00	
7				Savings Balance	1000	965	
8				Retirement Balance	5264	5279	
9				Gross Assets	\$12,743.00	\$12,313.00	
10							
11	Expenses						
12	Type	Due	Amt Due	Amt Pay	Notes		
13	Savings	01/05/12	15	15			
14	Retirement	01/05/12	15	15			
15	Fuel	01/05/12	50	50			
16	Food	01/10/12	130	130			
17	Mortgage	01/15/12	500				
18	Phone	01/20/12	100				
19	Utilities	01/25/12	350				
20	Credit Card	01/01/12	75	75			
21	Insurance	01/15/12	350				
22	Cable	01/15/12	125	125			
23	Total Expenses:		1710	Total Payments:		410	
24							



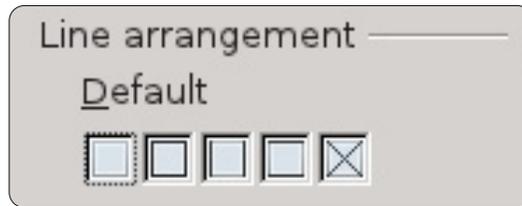
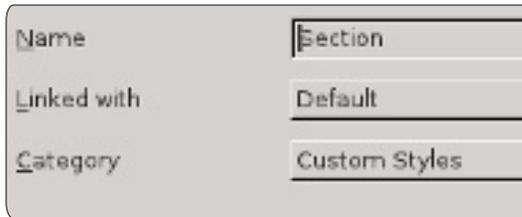
In the last part of this series, we added the data and formulas for our budget worksheet. The end result, while functional, is not very pretty or easy to read. Now, we will add some styles to our spreadsheet to help make the worksheet not only more pleasant to look at, but easier to read and find specific data. We will accomplish this using cell styles.

Back in part 3 of this series, we used paragraph styles to format the paragraphs in our documents. Cell styles are Calc's equivalent to paragraph styles. Cell styles allow us to specify the border, font, background color, font effects, number format, alignment and cell protection. Styles help to create consistency throughout the spreadsheet.

## Section and Column Title Styles



We'll start by creating styles for our section titles and column titles. Click on the styles icon (above).



Now, we will create a style for our column titles based on the Section style. Basing one style on another style makes it quick and easy to just add and change the differences between the styles. In the Styles and Formatting windows, right-click on the Section style and select New. Give the style the name "Column Title." You will notice that the style is linked to the Section style. If you browse through the tabs, you will see all the settings we made for the Section style are already set. To distinguish column titles from sections, we will give them a different background color. On the Background tab, select a suitable light color for the background, such as Blue 8.

## Applying the Section and Column Title Styles

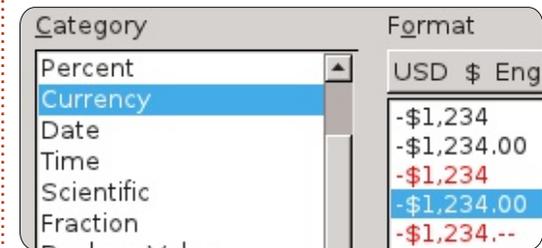
Now, we can apply our two new styles to cells in our spreadsheet. The sections are "Income This Period", "Assets", and "Expenses". Select the cells for these items and double-click on the Section style in the Styles and Formatting window. You can select more than one cell and apply the style all at once. For example, highlight all the column titles under Income (Source and Amount) and double-click on the Column Title style. Do the same for the column titles under the other two sections.

## Editable, Total, and Date Styles

Editable items are the items in our budget spreadsheet that we will need to change from use to use. These are most of the cells under the column titles, except those that contain formulas - which are our total cells. We will first create the Editable style and use it

as the link for our Total and Date styles.

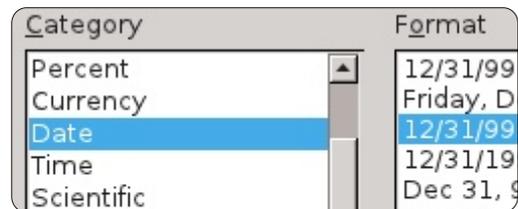
In the Styles and Formatting window, right-click on the default style and select New. Give the new style the name "Editable". On the Number tab, select currency and



your currency type. Set your font and font size on the font tab. I suggest a font size of at least 12 points. Make sure the font style is regular (not bold or italic). On the border tab, create light gray borders on the left and right. You can accomplish this by clicking on the third box under defaults. Make sure that the Protected box is unchecked on the Cell Protection tab.

Now, we will create the Total styles by linking it with the Editable style. Right-click on the Editable style in the Style and Formatting

window, and select New. Once again, we are starting with an exact copy of the style we right-clicked. Name the style "Total". We will make changes to distinguish our totals from ordinary items. On the Font tab, change the style to bold. On the background tab, select a darker gray color than the light gray we used for the borders - like gray or gray 40%. Finally, check Protected on the Cell Protection tab.



Apply the styles much in the same manner as we did previously. You will notice that if you apply the Editable style to the date column under expenses, you get a strange result for your dates (probably #####). That's because it was converted into currency. Right-click the Editable style and create a new style named "Dates". All we need to do here is change the number type to Date and select a simple numeric date style on the Numbers tab.

## Conditional Formatting

We need a way to break up the big block of data under the Expenses section. We could just put borders around them, but large groups of bordered boxes look dull. Instead, we will highlight all the even rows with light gray. We also want to do this quickly. For this we will use conditional formatting.

### ISEVEN (ROW())

With this formula, whatever style we choose will only apply to the even rows. For the cell style, click on the New Style button. Give the style the name "Editable Highlight" and link it to the Editable style. On the Borders tab, change the border color from light gray to gray. Move to the Background tab and change the background color to light gray. Click OK to save the changes. You will notice the Cell style is now Editable Highlight. Click OK and you will see the even number rows are highlighted in light gray.

Unfortunately, this has the side



effect of changing our dates again, but that is easily fixed by doing the same thing with the Date style. Select all the dates in the Expenses section. Format > Conditional Formatting. Once again use the formula ISEVEN(ROW()). Click on the New Style button and name the new style "Dates Highlight". Link the style with Dates style. Change the border color to gray and the background to light gray. OK to save the style, and OK to apply the conditional formatting.

## Finishing Touches

Just a few simple things to make all things even. If you have more than two items in the Income section, you can add the highlights to it as well using conditional formatting and the Highlight Editable style. Also, you can right justify the "Total Expenses" and "Total Payments" labels at the bottom.

Now, to test run your spreadsheet. Remember, we protected the cells we didn't want to change. Tools > Protect Document > Sheet. You can enter a password to

password-protect the document, or just click OK to protect it without a password. If you try to edit one of the protected cells you will get a message window saying the cell is protected. However, the unprotected cells are easily edited as before. Using cell protection is a good way to keep your formulas from getting changed once you have the spreadsheet set up and working the way you want it.

In the next part of this series, we will prepare our spreadsheet for printing by adding a header and footer to the page, and looking into our printing options.

	A	B	C	D	E
1	Income this Period				
2	Sources	Amount		Type	
3	Work	\$2,150.00		Period Income Total	
4	Freelancing	\$300.00		Savings Balance	
5	Bonus	\$50.00		Savings Transfer	
6	Misc	\$5,000.00		Total Expendable	
7				Savings Balance	
8				Retirement Balance	
9				Gross Assets	
10					
11				Expenses	
12	Type	Due	Amt Due	Amt Pay	
13	Savings	01/05/12	\$15.00	\$15.00	



**Elmer Perry's** history of working, and programming, computers involves an Apple IIE, adding some Amiga, a generous helping of DOS and Windows, a dash of Unix, and blend well with Linux and Ubuntu.



In my last article, I discussed setting up styles in LibreOffice Calc. This month, I will show you how to prepare, examine, and print your spreadsheet. We will add headers and footers to our sheet, use the Page Preview to examine how our sheet will look when we print it, and review the print dialog and how it affects the final printed pages.

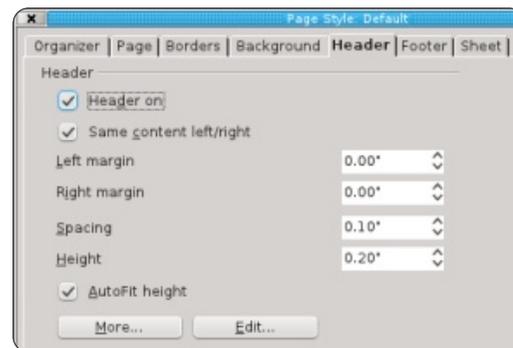
## Renaming Sheets

When you first create a new spreadsheet file, the default workbook starts with three sheets named Sheet1, Sheet2, and Sheet3. You can use these names in other places in your sheet, and we will use them when we create the header and footer for our budget spreadsheet. However, the default names are not very informative, so we will rename them. The names are located on tabs at the bottom program window. To rename a sheet, right-click on the tab and select Rename Sheet from the pop-up menu. The Rename Sheet dialog will display. Type in a meaningful name for the sheet, i.e. "February

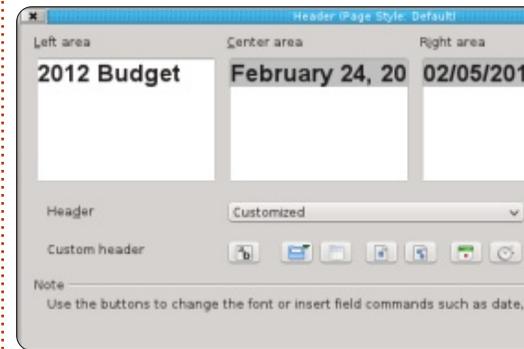
24, 2012" and click OK.

## Headers and Footers

Headers and footers allow us to create consistency between pages. Doing this on the sheet would mean shuffling cells as the sheet changes and grows. Using the page settings, we can create the same look for multiple pages.



Open the page settings dialog, Format > Page. Click on the Header tab. Here you can adjust the margins, width, and height of the header area. I would recommend checking the Autofit Height checkbox, otherwise your header may get cut off. Click on the Edit button to bring up the header area format dialog. You will notice the header is divided into three areas,



left, center, and right. Along the bottom, you will notice a toolbar. The toolbar lets you insert placeholders into the header and format the text. For our budget spreadsheet, we will place something in each of the areas. In the left area type "2012 Budget". For the center area, we will place our sheet name. To get the sheet name, click in the center area and delete any content that already exists, then click on the third button on the toolbar. This inserts the name you gave the sheet. For the right area, we will insert the current date. Click in the right area and delete any content that already exists. The next-to-last button on the toolbar inserts the current date. To change the font, size, color, etc, of the text, highlight the text in any of the

areas and click on the first button on the toolbar. This brings up a font dialog, where you can change the attributes of the text. Click the OK button when you are finished editing your header.

We also might want to separate our header from the rest of the sheet with a border or background color. We can do this by clicking on the More button on the Header tab in the Page dialog. For mine, I just put a 0.50pt line at the bottom.

The Footer tab is the same as the Header tab, but let's put some different information in the three areas. On the Footer tab, click the Edit button. In the left area, place the sheet name using the third button on the toolbar like we did with the header's center area. In the center area, delete the content that is already there and type the word Page and a space. Click on the fourth button in the toolbar. This creates a placeholder for the page number. This placeholder will increment for each page of the sheet. In the right area, click on the last button on the toolbar to insert

# HOWTO - LIBREOFFICE PART 12

a current time placeholder. This will print the time when you print the sheet. Having the current date and time on the sheet can come in handy when you have to do revisions and need to know which one is the most current. As with the header, we can edit the attributes of the text by highlighting the text we want to change and clicking on the first button in the toolbar. Click OK when you are done editing.

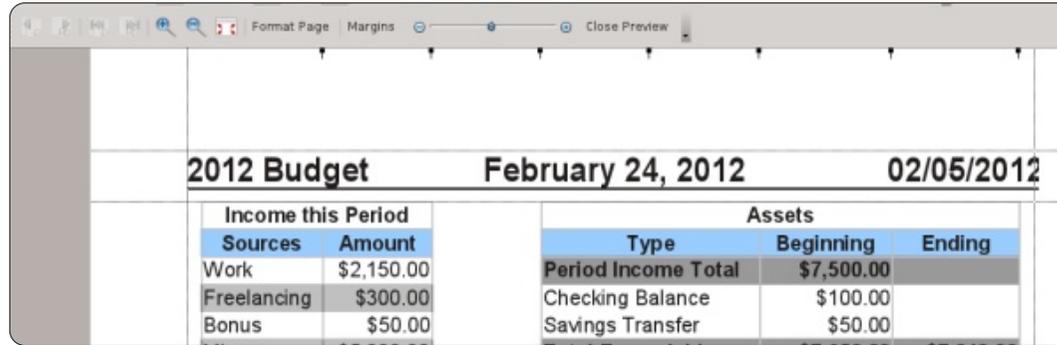
To separate the footer from the rest of the document, we can use the More button to create a border or background color. I used a 0.50pt border on the top.

In our setup, we used all the buttons in the header/footer edit dialog except for two. The second button inserts the filename of the workbook, and the fifth inserts the total number of pages.

We are finished editing the page setup. Click OK to close the page-setup dialog.

## Page Preview

The page preview allows us to make final adjustments to our



The screenshot shows a spreadsheet with a header row containing '2012 Budget', 'February 24, 2012', and '02/05/2012'. Below the header, there are two tables. The first table is titled 'Income this Period' and has two columns: 'Sources' and 'Amount'. The second table is titled 'Assets' and has three columns: 'Type', 'Beginning', and 'Ending'.

Income this Period		Assets		
Sources	Amount	Type	Beginning	Ending
Work	\$2,150.00	Period Income Total	\$7,500.00	
Freelancing	\$300.00	Checking Balance	\$100.00	
Bonus	\$50.00	Savings Transfer	\$50.00	

sheet before printing. With the preview, we can make sure everything fits on the page the way we want it, and the data shows as we intended.

To open the page preview, go to File > Page Preview. The current window is replaced by the page preview window. You can make several adjustments while in page preview mode.

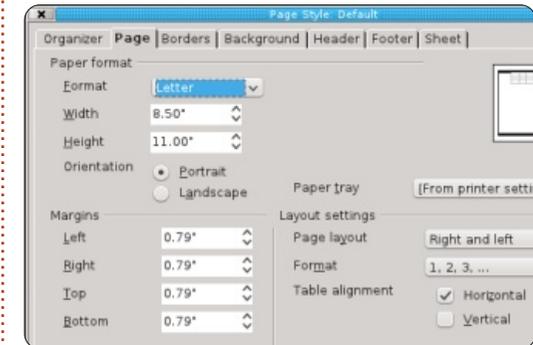
The slider in the toolbar is the scaling factor. This allows you to make the cells bigger or smaller so they fit on the page the way you want. You can increase the size by clicking on the plus (+) or reduce it by clicking on the minus (-). You can also click and drag the adjustment handle.

The Format Page button displays the Page Style dialog. Here you can change your overall page

margins and background color, and make corrections and adjustments to your header and footer. Two things we haven't mentioned yet are the table alignment and the print order. Table alignment is found on the Page tab. It allows you to center the table horizontally, vertically, or both. On the Sheet tab, the page order controls how the cells are printed on the page. This allows you to make your data layout in the order and way you intended. If you have more columns than can fit on a page, you can change it from the default to left-to-right, then down. You can also set the beginning page number should you need something other than 1. You can also specify what prints and what does not. Finally, you can manually adjust the scaling here as well.

The page preview gives you buttons to page forward and

backward, and jump to the first page or the last page. There are also zoom in/out buttons for closer examination of the page.



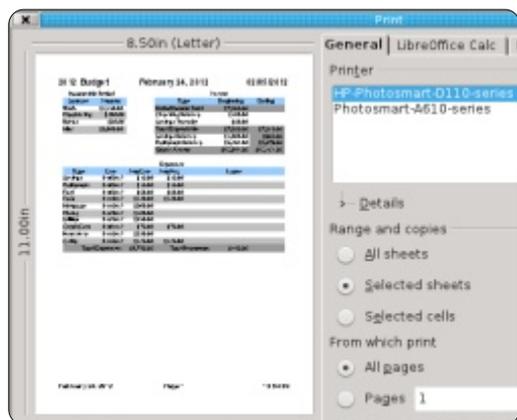
The Margins button gives you the ability to adjust the page, header, footer, and column margins. Click the Margins button to activate margins mode. The dotted lines let you manually adjust the page, header, and footer margins. The black markers at the top allow you to adjust the widths of the columns. Click the Margins button again to exit margins mode.

Close Preview exits the preview mode.

## Printing

Finally, we have completed all our preparation and it is time to print our sheet. File > Print brings up the print dialog. On the General

tab, you can select your printer. Click on the Properties button for settings specific to your printer. You can choose to print just the selected sheets, all sheets, or just selected cells. You can also specify whether to print all the pages or just selected pages. If you don't feel like ordering your pages after you print, you can also choose to print them in reverse order. You have an option to print multiple copies, and whether or not to collate them.



On the LibreOffice Calc tab, you can choose to print or not print blank pages. The Page Layout tab gives you options for printing more than one page on a sheet of paper, what order to print them, and whether to put a border around the page. On the Options tab, you can choose to print to a postscript file, and, if you are printing

multiple copies, whether to do it as one print job or multiple.

Once you have everything set, click Print.

This may seem overkill for a single document, but you need to always consider how often you will use and change the document. If you use the sheet often, as in a budget, once the header and footer is set, you will never have to change them again. By considering the reusability, you decrease the setup time the next time you use it.

**Next month, we will look at some quick tips and tricks for working with spreadsheets in Calc.**



**Elmer Perry's** history of working, and programming, computers involves an Apple IIE, adding some Amiga, a generous helping of DOS and Windows, a dash of Unix, and blend well with Linux and Ubuntu.

### Quick Opinion

## Tune out, Drop Out, Get things Done

by Allan J Smithie

I turned off the Internet today. I don't mean the whole thing. I mean my access to it. I unplugged the router from the wall.



I also killed my music player and left the mobile phone in another room.

Something mystical then happened. *Concentration.*

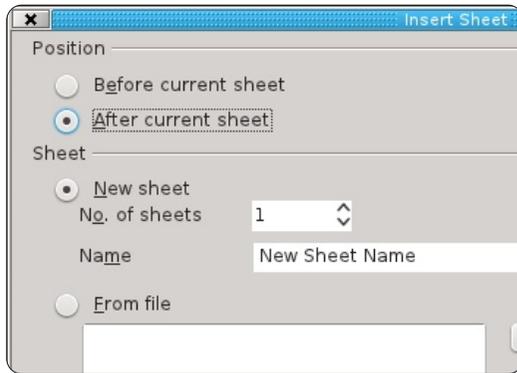
I love the Internet. I'm probably addicted. It's a huge resource for information and an unparalleled research, educational and entertainment resource, but every so often I have to shut it all out just to Get Things Done.

Turn off the TV, radio, iPod, Xbox, PSP and Wii. Close the browsers (both of them), kill the chatroom, the IRC, AIM, Facepunch, Twiddle and anything else that's running. The fact checking can wait. Contrary to contemporary systems of belief, your status doesn't have to be updated in real time. It will all still be there. After you get something **DONE**.



So far, we have covered many topics for using LibreOffice's Calc, but Calc has many minor operations that are worth knowing. In this article, I will give you my top-10 quick tips for using Calc. Most of them have to do with manipulating the current sheet. You can use these tips in most any sheet you are working with.

## 1. Naming Sheets



The default name for sheets is SheetX, where X is a number. You have 3 ways to name a sheet. The first is when you create a new sheet, using Insert > Sheet. In the dialog, you have a choice of how you want to name the sheet. You can also choose to insert multiple

sheets. When inserting multiple sheets, you have no control over the sheets' names. They will get the default SheetX naming convention.

However, you may need to rename a sheet after it has been created. This is where the second and third methods apply. The second way to name a sheet is by right-clicking the sheet's tab and selecting Rename Sheet from the menu. The Rename Sheet dialog will come up, and you can change the name of the sheet. The third method is simply to double-click the sheets tab. This brings up the rename Sheet dialog, where you can change the sheet's name.

**NOTE:** The sheet name must start with a letter or digit. Then, sheet names can include spaces, letters, digits, underscore, and some special characters, i.e. -, &. When saving in the Microsoft Excel format, sheet names cannot contain the :, \, /, ?, \*, [, and ] characters. If you have an invalid character in the name, Calc will give you an error message.

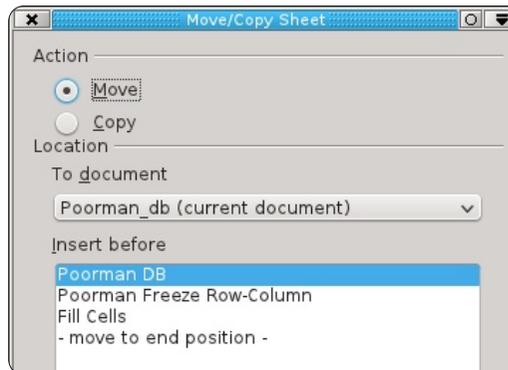
## 2. Deleting Sheets

Sometimes, you will want to delete a sheet, or multiple sheets, from the workbook. To delete a sheet, right-click on the sheet's tab and select Delete from the menu, or select Edit > Sheet > Delete from the menu bar. Calc will verify that you do want to delete the sheet. To delete multiple sheets hold down the Ctrl key while clicking on the tabs for the sheets you want to delete. Use either the right-click or the menu method to delete the sheets. Once again, Calc will verify that you want to delete the sheets.

Sometimes, you need to rearrange or copy sheets. For example, you might want to order a multiple sheet workbook in order of predominate use, or by date. Copying a sheet comes in handy when you need to create an exact duplicate of the current sheet, thereby creating a history. When you copy a sheet, you get an exact duplicate of the sheet you copied; however when you make changes to the new sheet, those changes are not translated to the old sheet. For example, you can create a copy of a budget spreadsheet for each pay period of the year and keep them all in one workbook.

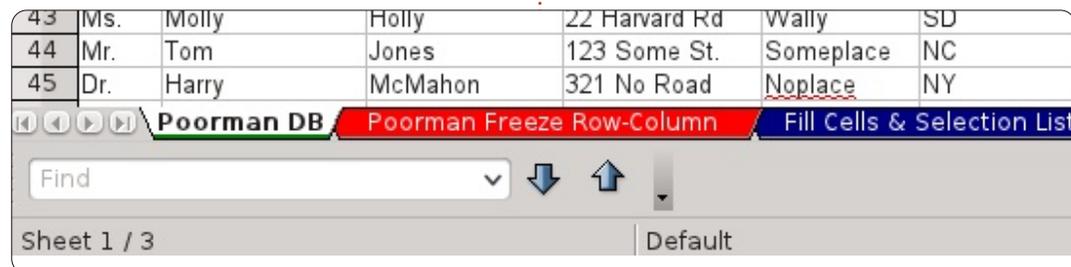
Moving sheets is accomplished in one of two ways. The first method is to drag the tab of the sheet to the position you want it. Double arrows will show the location the sheet will occupy when you release it. The other method is through the Move/Copy Sheet dialog. You can access the Move/Copy dialog by right-clicking the tab you want to copy or move and selecting Move/Copy Sheet, or through the menu bar, Edit > Sheet

## 3. Move/Copy Sheets



> Move/Copy Sheet. Under the Action section, you can select to copy or move the current sheet. NOTE: If you have only one sheet in the workbook, move and copy are grayed out, and copy is selected. In the Location section, you can select to move/copy the sheet to the current document, to another open document, or to a new document. The Insert Before section controls the placement of the move/copy. The sheet will move/copy to a position before the selected sheet. The Name section allows you to give the sheet a new name. Renaming your sheet is a good idea when copying. If you do not give it a new name, it will keep the existing name and append an underscore and a number, i.e. MySheet\_2.

## 4. Color Tabs



Visual aids can often help get things done quickly while working with a large workbook with multiple sheets. Color is an easy to deploy visual aid. Giving each sheet tab a different color can help you find it and go to it quickly. The tab of the current sheet is always white, but you can still give it a color for when it is not selected. To set the tab color of a sheet, right-click the tab and select Tab Color from the menu. A color dialog will pop up. Simple select the color you want for the tab and click OK.

## 5. Freeze Row(s)/Column(s)

Long and wide sheets often require scrolling to view some of the content in the sheet. However, in many cases the first columns or rows contain information you need in order to make sense of the information. Luckily, Calc provides you with a way to freeze rows and columns in place.

	A	B	E	F
1	Title	First Name	City	State
56	Mr.	Tom	Someplace	NC
57	Dr.	Harry	Noplace	NY
58	Rev.	Mike	Gospel	CT
59	Ms.	Amber	Thatplace	CA
60	Mr.	Charlie	Lunix	NJ
61	Ms.	Molly	Wally	SD
62	Mr.	Tom	Someplace	NC
63	Dr.	Harry	Noplace	NY
64	Rev.	Mike	Gospel	CT
65	Ms.	Amber	Thatplace	CA
66	Mr.	Charlie	Lunix	NJ

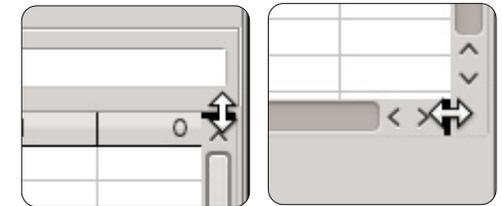
To freeze a row or rows, select the row below the row(s) you want frozen by clicking on the row number, then Window > Freeze. To unfreeze the rows, select Window > Freeze again. The same is done with the columns by selecting the column letter to the right of the columns you want frozen, then Window > Freeze.

To freeze both rows and columns, select the cell below the rows you want frozen and to the right of the columns you want frozen, then select Window > Freeze.

## 6. Split Screen

Another way to view large sheets is using the split screen. To split the screen horizontally, grab the thick bar just above the vertical scrollbar. The mouse cursor will

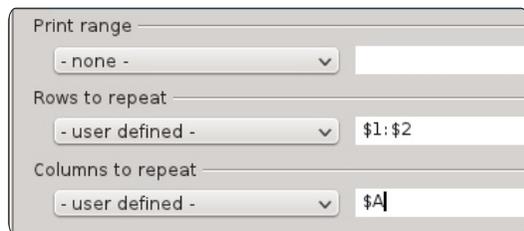
become a double arrow. Drag the thick bar down to the position where you want it. To split the screen vertically, do the same with the thick bar to the right of the horizontal scrollbar. To get a quick horizontal and vertical split, just select Window > Split. The spits are shown by a thick heavy line. Each area of the split screen is manipulated by the various new scrollbars that appear.



	A	B	C	D	E	F
1	Use this bar to enter formulas.	First Name	Street Address	Street Address	City	Stat
2	Mr.	Tom	Jones	123 Some St.	Someplace	NC
3	Dr.	Harry	McMahon	321 No Road	Noplace	NY
4	Rev.	Mike	Mickey	547 Trinty Way	Gospel	CT
5	Ms.	Amber	Sams	54 This Way	Thatplace	CA
6	Mr.	Charlie	Hacker	101 Binary Way	Lunix	NJ
7	Ms.	Molly	Holly	22 Harvard Rd	Wally	SD
8	Mr.	Tom	Sawyer	123 Some St.	Someplace	NC
9	Dr.	Harry	McMahon	321 No Road	Noplace	NY
10	Rev.	Mike	Mickey	547 Trinty Way	Gospel	CT
11	Ms.	Amber	Sams	54 This Way	Thatplace	CA
12	Mr.	Charlie	Hacker	101 Binary Way	Lunix	NJ
13	Ms.	Molly	Holly	22 Harvard Rd	Wally	SD
14	Mr.	Tom	Jones	123 Some St.	Someplace	NC
15	Dr.	Harry	McMahon	321 No Road	Noplace	NY
16	Rev.	Mike	Mickey	547 Trinty Way	Gospel	CT
17	Ms.	Amber	Sams	54 This Way	Thatplace	CA
18	Mr.	Charlie	Hacker	101 Binary Way	Lunix	NJ
19	Ms.	Molly	Holly	22 Harvard Rd	Wally	SD
20	Mr.	Tom	Jones	123 Some St.	Someplace	NC
21	Dr.	Harry	McMahon	321 No Road	Noplace	NY
22	Rev.	Mike	Mickey	547 Trinty Way	Gospel	CT
26	Mr.	Tom	Jones	123 Some St.	Someplace	NC
27	Dr.	Harry	McMahon	321 No Road	Noplace	NY
28	Rev.	Mike	Mickey	547 Trinty Way	Gospel	CT
29	Ms.	Amber	Sams	54 This Way	Thatplace	CA
30	Mr.	Charlie	Hacker	101 Binary Way	Lunix	NJ
31	Ms.	Molly	Holly	22 Harvard Rd	Wally	SD
32	Mr.	Tom	Jones	123 Some St.	Someplace	NC
33	Dr.	Harry	McMahon	321 No Road	Noplace	NY

To undo a split screen, grab the thick heavy line and drag it up to the top for a horizontal split or to the right for a vertical split. To cancel all spits, use Window > Split.

## 7. Print Rows or Columns on Every Page



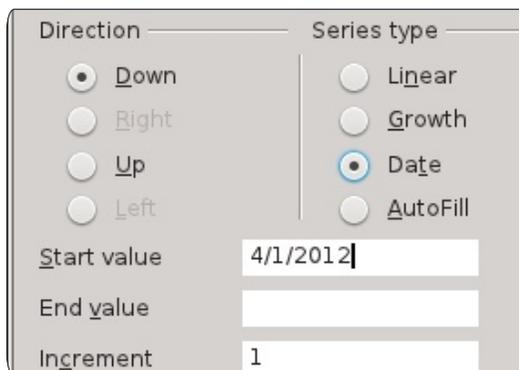
Printing a sheet which will span multiple pages may require key information in certain rows or columns in order to help make sense of the data. To control how the pages print, you can define whether certain rows or columns repeat on each page.

Open format > Print Ranges > Edit. Under Rows to repeat, you can define the rows that need to repeat on each page, i.e. to repeat the first two rows enter \$1:\$2. Under Columns to repeat, you can do the same for the columns, i.e. to repeat the first column type \$A.

## 8. Fill Selected Cells

At its most basic use, the fill tool is a way to repeat information in a cell. To repeat the information in a cell, select the cells you want to repeat, then Edit > Fill > (the direction you want to fill: left,

right, up, or down).



However, the real power of the fill tool come through using the Fill Series. Edit > Fill > Series. The Fill Series tool allows you to create many different types of serial information, from numbers to dates. There is also AutoFill, which uses a series of text predefined in the program. Examples of the AutoFill are Days of the week and months. You can define your own AutoFill ranges in Tools > Options > LibreOffice Calc > Short Lists.

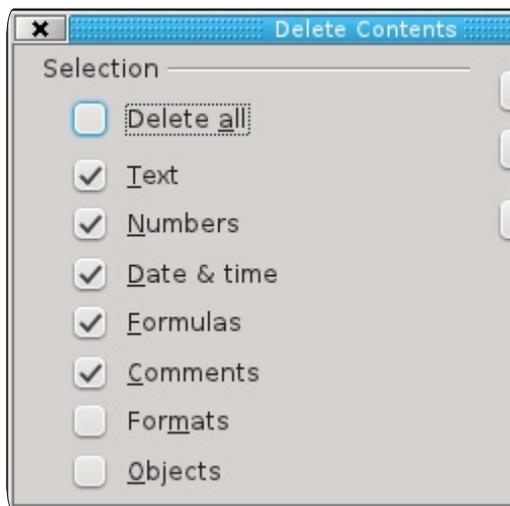
## 9. Selection List



The selection list is a text function. The selection list works only for text, and will contain only text from the current column your selected cell is in. To activate

the list, select an empty cell and press Alt + Down Arrow on your keyboard.

## 10. Remove Data from Cells



Sometime, you need to not just change the data in a cell but completely remove it. Removing data can be done in one fell swoop, and you can select the type of information that is removed. For example, you can select a group of cells and choose to remove only the formatting, or only the text. There is also a remove all to remove all the information from the cell(s). You activate the Remove Content dialog by selecting a cell or cells and pressing the Backspace key on the

keyboard. You can also do this through the menus: Edit > Delete Content.

So, there you have it; my top-10 quick tips for LibreOffice Calc.

**In my next article, we will continue our journey in Calc by learning how to create charts and graphs.**



**Elmer Perry's** history of working, and programming, computers involves an Apple IIE, adding some Amiga, a generous helping of DOS and Windows, a dash of Unix, and blend well with Linux and Ubuntu.



**W**hile data collection is useful and helpful in determining results, or whether goals were met, charts and graphs simplify data so others can quickly digest and interpret results. The art of charts and graphs is well beyond the scope of this article, but I will show you how to create a chart in Calc, which you could use in Writer or Impress. There are many predefined charts and graphs available in Calc.

We will use a simple collection of data to create our chart. The data represents the boat rentals for a six month period. We will use a bar chart to show the relationship between the different types of boat rentals for each month.

## The Chart Wizard

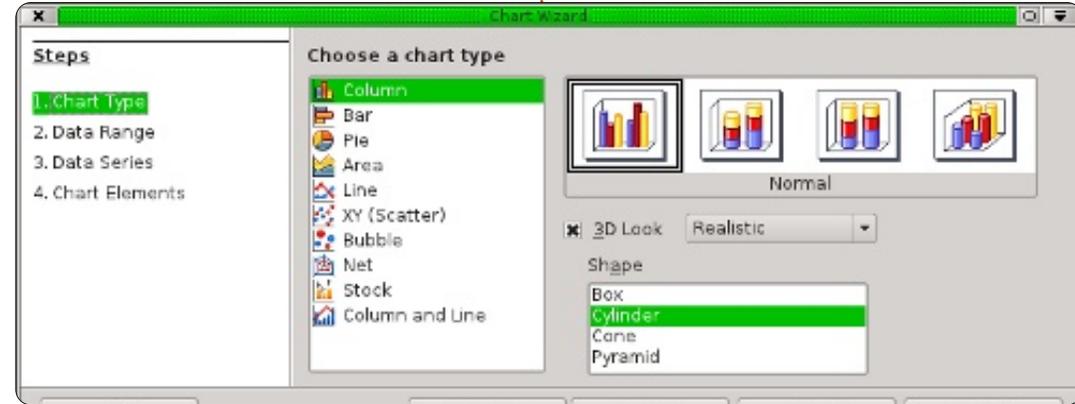
The chart wizard allows us to get the basics of our chart completed quickly and easily. In fact, sometimes the chart wizard is all you will need to complete your chart. The wizard is your jumping off point for all chart creation.

Before starting the wizard, you need to highlight the data used for the chart. You will want to make sure you just highlight the data and their labels. Although you can modify the ranges for the data series later, getting it as close as possible helps Calc to better render the final results.

	A	B	C
1			
2			
3			Equipment Re
4		Boats	Canoes
5	Jan		12
6	Feb		14
7	Mar		13
8	Apr		20
9	May		18
10	Jun		15
11			



You have two ways to start the chart wizard. You can click on the chart wizard icon (shown right) on the main toolbar, or through the menu with Insert > Chart. The chart wizard consist of four steps. We will walk through each of the steps, but it is possible to click the Finish button at any time to end the wizard process.



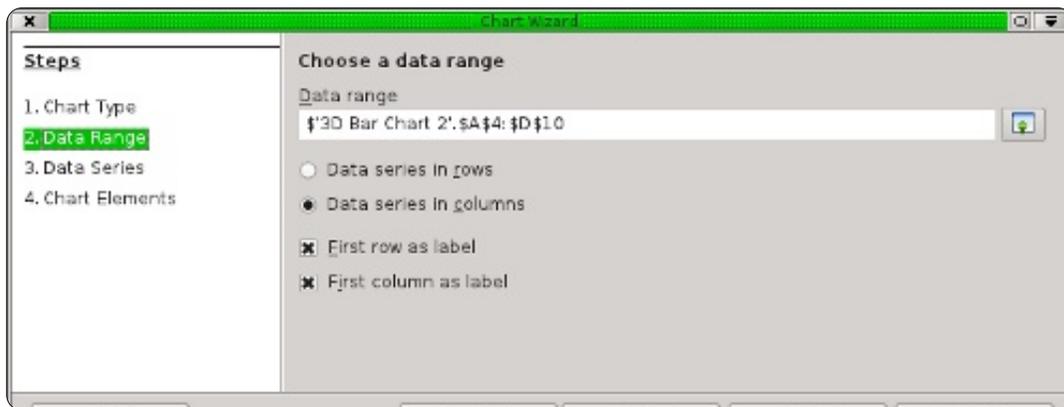
## 1. Chart Type

The chart type (above) is where you select the type of chart you want to create. For some chart types, you have the option of 3D effects, and for others you do not. For our chart, we will select the basic bar chart. Since we have the option of 3D effects for a bar chart, we will also check the 3D Look checkbox. In the 3D Look dropdown box, you have the options of Realistic or Simple. This helps determine the look and shading of the 3D effect. We will use Realistic. Finally, you can select different shapes for your data series. We will use cylinder. Click the Next button to move to the next step.

## 2. Data Range

In step two we define the data range and how Calc will use the data range to create the chart. If we need to change the range from what we selected, we can type in the range or select the range from the spreadsheet. The small button at the end of the data range textbox will shrink the wizard dialog so more of your spreadsheet is visible.

We need to tell Calc whether our data series are defined by row or column. For our example, we used columns. Also, since we selected the labels as well as the data, we need to check both First



row as label and First column as label.

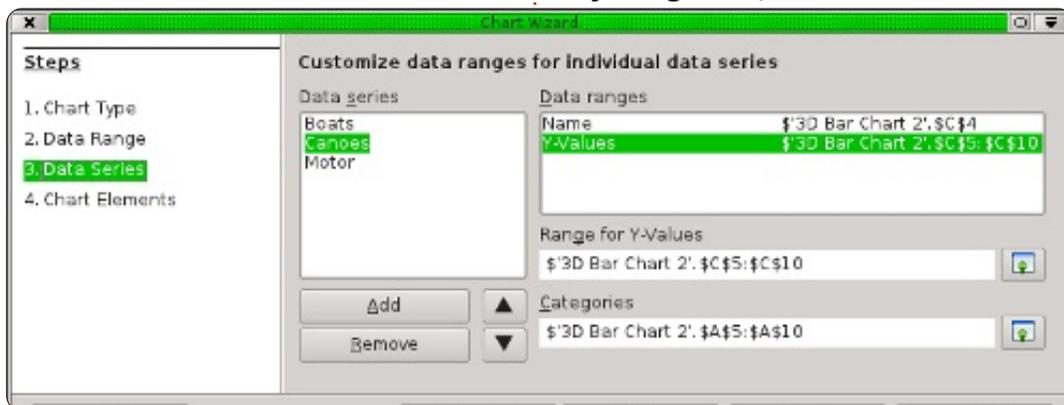
Click the Next button to move to the next step.

## 3. Data Series

The third step (below) lets us redefine, add, change the order, and remove data from our data series. You will see the data series for the chart defined by their label in a listbox. You can change the

range of the series much as you could in the data range step; however, keep in mind, this is only for one set of data and not the entire chart. You can add another series by clicking on the Add button. You can remove a series by selecting it and clicking the Remove button. Change the order of the series by selecting the series you want to move and use the up and down arrow buttons.

We don't need to change anything here, so click the Next



button to move to the last step of the wizard.

## 4. Chart Elements

The fourth step (above right) of the wizard allows us to define names for the different parts of our chart, including title, subtitle, and x and y axis. We can also set the location of our legend and the grid for the chart area. For our chart sample, give it the title "Sample Bar Chart". We also want to label our Y-Axis as "Num of Rentals". Since our X-Axis is the months of the year, we don't really need a label for the X-Axis. It is self-explanatory. Set the legend to appear at the bottom, giving our data more room to spread out.

We are now finished with the Chart Wizard. If you ever need to

revisit any of the steps, you can use the Back button or select the step from the list on the left. Click the Finish button to complete the wizard and display the chart in your spreadsheet.

## Formatting Chart Elements

After creating the chart with the Chart Wizard, it is possible to change the elements of the chart. After clicking on finish, you will notice that the newly created chart is selected and your toolbar has changed. You have the chart formatting toolbar instead of the standard edit toolbar. The new toolbar has a dropdown box which allows you to select the different elements you can change. After selecting an element from the dropdown, click on the Format

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Selection button to display the dialog for that element.

There are also buttons for changing the chart type, and displaying the chart grid and legend. The button with the double arrow beside the capitol A is used to scale the text with the chart when you resize it. I highly recommend this, as it keeps things proportional. In addition to the changes in the toolbar, you will find changes in the Insert and Format menus as well. These changes allow you to insert and format elements of your chart.

You can move the chart by clicking and dragging the borders. Resize the chart by clicking and dragging one of the eight handles. If you selected the text scale button, the size of the text will scale with the chart as you change it.

Now, let's make some changes to our chart. In the dropdown list in the toolbar, select Chart Title and click on the Format Selection button. On the Font tab, change the size to 18 and the style to bold. Click OK. Next, select Chart Area and click Format Selection. The chart area is the entire background



of the chart. On the Area tab, select a background color of light gray. You will notice this changes the color of our data area as well, but we want the data area to stand out. Select Chart from the dropdown list and click Format Selection. On the Area tab, select to fill with color and pick white. Since we are using a 3D chart, let's change the perspective a little: Format > 3D, check the Perspective checkbox and change the percentage to 50%. You will see

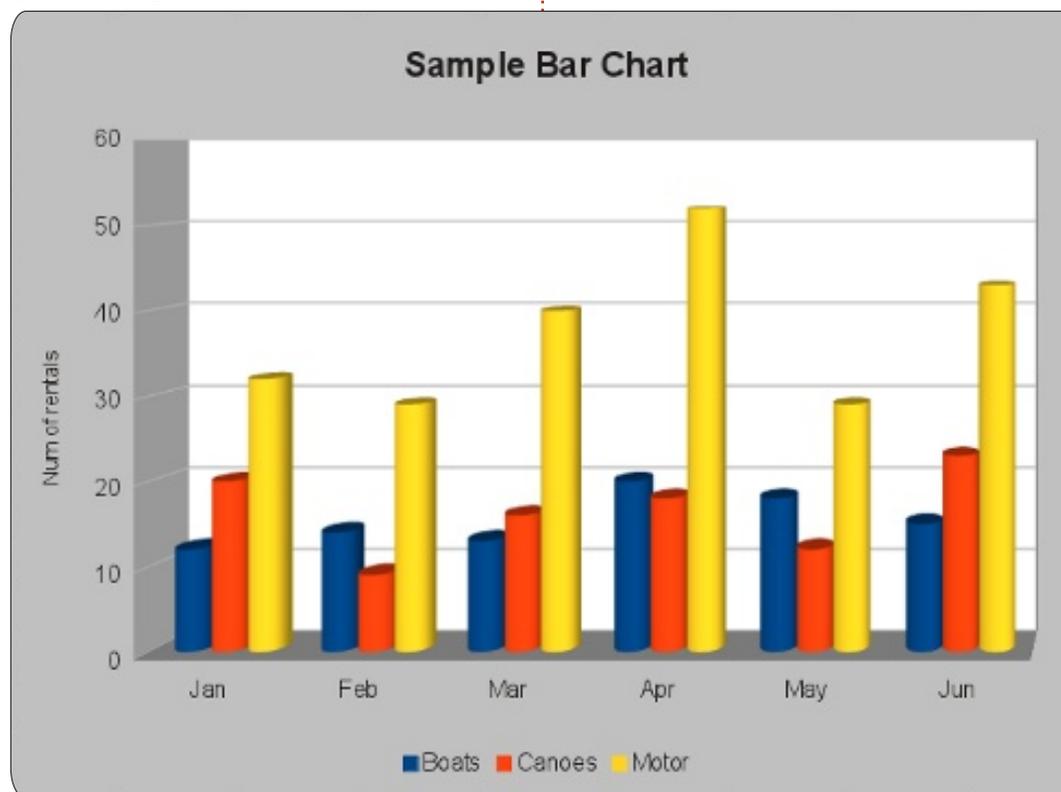
his changes the perspective of the chart.

There are other things to do on your own. Try changing the color of one of the data series or adjusting the placement of some of the elements. All can be done through the dropdown list, and the Format and Insert menus. When you deselect the chart, you are taken back to normal toolbars and menus. To edit the chart later, just

double-click the chart, and you get the specialized toolbar and menus back.

We have only touched the surface of the chart and graphs in Calc, but I encourage you to play around with the different types and elements. The type of chart you use is dependant upon the type of data you have and the information you want to convey.

**Next time, we will begin our work in Impress, LibreOffice's presentation program.**



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Impress is LibreOffice's presentation program and is equivalent to Microsoft Office's Powerpoint. With Impress, you can create professional visual presentations that include graphics, pictures, videos, audio, spreadsheets, and charts. Impress has a presentation wizard that is very useful for setting up a new presentation and getting you started on the right track, and a main window that helps break the process down into tasks.

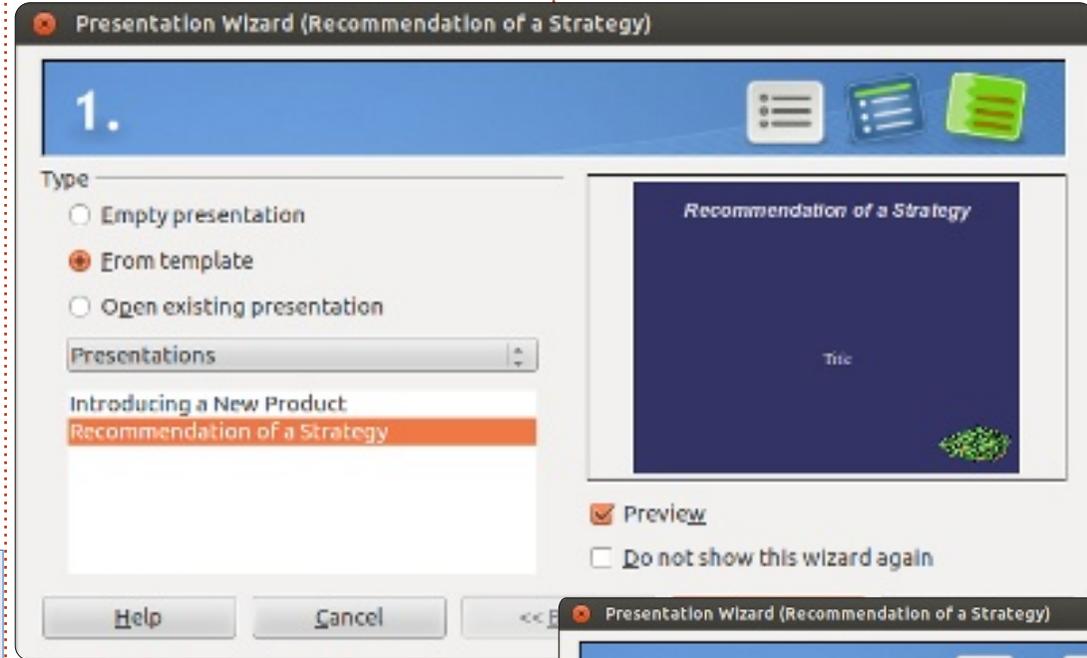
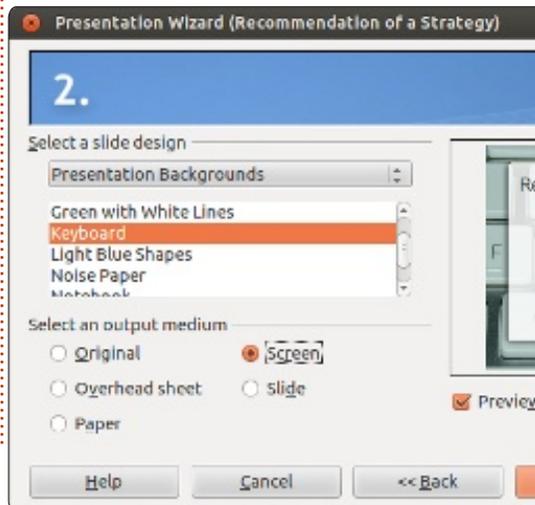
## The Presentation Wizard

You can create a new blank presentation by going to File > New > Presentation. However, to start the presentation wizard, click on File > Wizards > Presentation. If you want to start with the wizard every time you create a new presentation, you can turn it on in the settings. While in Impress, click on Tools > Options > LibreOffice Impress > General, and check "Start with wizard" under New

document.

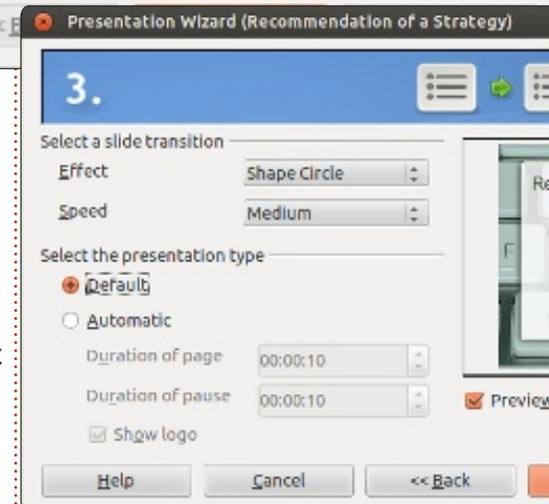
The first screen of the wizard (right) lets you pick from an empty presentation, a template, or open an existing presentation. If you select "From template", there are two default templates in Impress. Both come with predefined slides. I recommend you have Preview checked as it allows you to see a visual of your presentation as you create it in the wizard.

**TIP:** At any point in the wizard, you can click the Create button to create a new presentation. This allows you to use only the parts of the wizard you need.



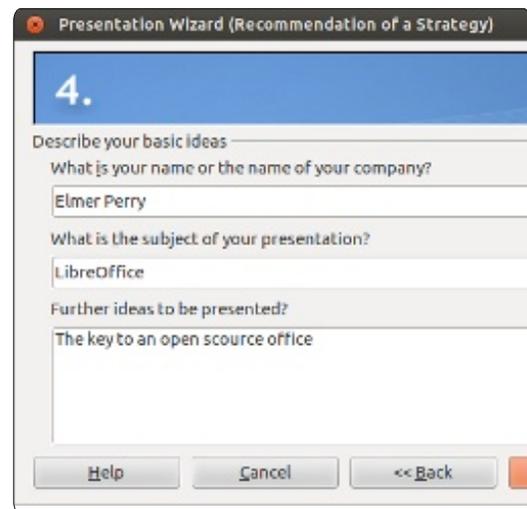
Click Next >> to move to the second screen of the wizard. On this screen you can pick from many different backgrounds for your presentation. You can change the background for individual slides later, but this will become the basic background for your presentation. You will also want to select the output medium for the presentation - normally screen - but other options are available should you need them.

Click Next >> to move to the



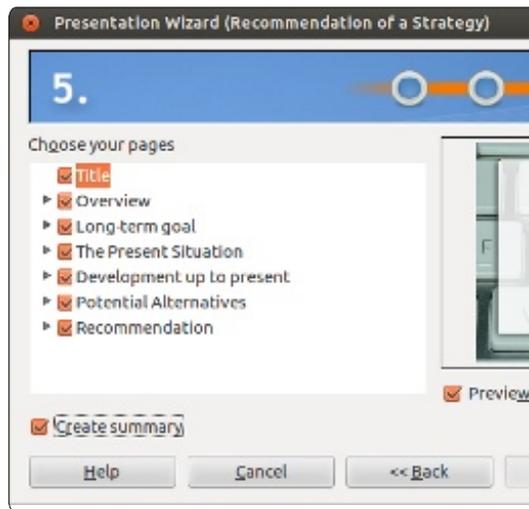
third wizard screen. You can pick a slide transition for changing from one slide to the next. There are many different transitions to choose from. When you select a

transition, you get a preview on the effect in the preview window. You can also adjust the speed of the transition. You can change the transition for individual slides later, but the transition, along with the background, is one of the things that create consistency in your presentation. On this screen you can also pick the presentation type. "Default" advances the elements and slides through mouse clicks or the keyboard. "Automatic" allows you to set each slide to advance after a certain amount of time. The choice will depend on the presentation and is beyond the scope of this article.



Click Next >> to move to the fourth wizard screen. Here you can give a topic, company name (or

your name if your presentation is not for a company), and the ideas behind your presentation. The information you use here will plug into your opening slide.



Click Next >> to move to the fifth wizard screen. If you selected a template on the first screen of the wizard, you can use this screen to preview each of the slides after your changes. You can select whether a slide will be included in the presentation or not. Check "Create summary" to create a summary of your slide.

**SIDEBAR:** You can always use the << Back button to move back and change elements of your presentation.

Click on the Create button, and



Impress will create the slides for your new presentation.

## The Main Window

The main window for Impress (above) is divided into three sections, the Slide pane, the Workspace pane, and the Tasks pane. You can hide the Slide and Tasks panes by clicking the X in the upper corner of each pane. To show the panes again use View > Slide Pane or View > Tasks Pane. Alternatively, you can use the Hide/Show markers (circled in red in the image) to hide and show the panes.

## The Slide Pane

The Slide pane shows thumbnails of all the slides in your presentation in the order in which they will appear in the presentation. In the Slide pane, you can add, delete, copy, paste, move, duplicate, rename, or hide slides. Clicking on a slide in the Slide pane places it in the Workspace pane where you can change and modify it.

## The Workspace Pane

The Workspace pane is the main work area for editing slides. You have five tabs in the Workspace pane.

## Normal View

Normal View is where you make changes to individual slides. Here you can add images, modify and add text, animation effects, and more.

## Outline View

The outline view displays an outline of all the text in the default text boxes on each slide. Each slide is numbered. You can use the outline view to proof and change the text on your slides, as well as add text to the slides. The slide names are not included in the outline.

## Notes View

You can use the Notes View to add notes to individual slides. You can change the size of the note box under the slide by clicking on the border and dragging the handles. The notes will not show in the presentation, but you can print them and use them during your presentation or as handouts.

## Handout View

In Handout View, you can setup how your handout of the presentation will print. If you

select Layout in the Tasks pane, you can set the number of slides that show on each page of the handout (up to 9 slides per page). You can also use this view to determine what information will print on the handouts.

### Slide Sorter View

The Slide Sorter view works much like the Slide pane but gives you more space to work. You can add, delete, move, copy, paste, duplicate, rename, and hide slides. You can also work with groups of slides by selecting more than one slide.

## The Tasks Pane

The Tasks pane has five sections. You expand a section by clicking on the section name. You can only expand one section at a time.

## Master Pages

Here you define the page style for your presentation. Impress contains many predefined master pages you can use. You can modify the look of a master page using styles. A single presentation can contain more than one master

page, allowing you to use more than one visual style in the presentation.

## Layouts

The prepackaged layouts are shown here. You can select a layout - and use it as it is or modify it. Unfortunately, you cannot save custom layouts to the layout lists.

## Table Design

Standard table layouts are shown here. You always have the option of changing the layout, and the table will behave much like a table in Calc.

## Custom Animation

With custom animations, you can control when and how elements appear on the slides. You have many different options that help create the visual effects you need as you give your presentation. Don't go overboard here unless you have a good reason. While animations can make your presentation visually pleasing and interesting, they can also make your presentation look unprofessional and overwhelming.

On the other hand, if you need to make an emphasis on a certain point, custom animations can help you accomplish such emphasis.

## Slide Transition

The Slide Transition section gives you access to changing how one slide replaces the next. You have the choice of many different transitions as well as the speed of the transition. If you use automatic transition, you can also control how long the slide will display.

This has been a quick overview to get you started working in Impress. I encourage you to begin to play with the different views, sections, and layouts to get a feel for how they work and what you can do with them. Next time we will begin work on editing slides, adding text, and adding graphics to our slides.



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# HOW-TO

Written by Elmer Perry

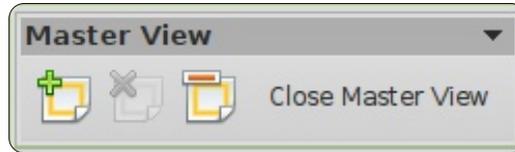
# LibreOffice Pt16: Impress

A great presentation begins with a pleasing and well thought out slide design. You also need consistency between your slides, elements that fit them together. In LibreOffice, you can use the Master Pages to create the base design for your presentation. Master Pages become the framework for the entire presentation, binding the elements of our presentation together. Much of this is accomplished through styles, and Master Pages are the main style. You can think of Master Pages being equivalent to Page Styles in Writer.

## Editing Master Pages

To edit master pages, you must switch to the Master View. Start Master View through View > Masters > Slide Master. Alternatively, you can right-click the master page you want to edit in the Master Page section of the Tasks pane, and select Edit Master.

When you enter Master View,



the master toolbar appears. The master toolbar gives you options specific to editing master pages. Use add to add a new master page. Delete allows you to delete the selected master page. Delete is grayed out when you have only one master page, because you must

have at least one. Rename lets you rename the currently selected master page, and Close Master View exits master page editing.

You have five predefined editable areas in a master page:



**Title Area** – The title area contains the title of the slide. Think of it as the subject of the slide.

**Object Area** – The object area contains the data of the slide, whether it is text, an image, a chart, or a table. As you will learn, the data of the slide is not confined to the object area. You can add elements outside the object area, but it's a good idea to keep data generally in this area for consistency in your presentation.

**Date, Footer, and Slide Number Area** – By default, these areas do not show up on the actual slide. To change, go to View > Header and Footer, and you can change whether or not these objects will appear on the slides.

## Modifying the Master Page



# HOWTO - LIBREOFFICE Pt16: IMPRESS

We will start with the default style for your master page. First, let's change the background. Format > Page. On the background tab, use the dropdown box and select gradient. In the gradient list, select Radial red/yellow. Click OK. This gives you a bright, sunny background to work on.

**NOTE:** You can download the icon graphic used in this tutorial at <http://eeperry.co.cc/resources/modules.png>.

Next, we will add a graphic to your master page. The graphic will show up on all slides that use this master page. I created a ribbon graphic containing the icons for all the LibreOffice applications. We want it to sit just below the object

area. Insert > Picture > From file. Select your picture and Open. Move the image to the position you want it, just below the object area. You want the image centered at the bottom. Rick-click the image and select Alignment > Centered. You also want the image to appear behind any objects which might go over it. Right-click the image again, and select Arrange > Send to back.

Now, let's add a line under the title. Select the line tool from the drawing toolbar at the bottom of the window, and draw a line under the title area. You can change the line style using the line toolbar. Change the style of the line, the thickness, color, and the start and end arrow styles.

Finally, let's edit the date, footer, and slide number areas (below). While in Master View, you can change the size and placement of these objects, but actually filling them with content can be done at any time. View > Header and Footer. On the slide tab, there is a checkbox for each of the three areas: date, footer, and slide number.

Under date and time, you can choose a fixed date or a variable date. You can use fixed date when you have a presentation that is presented one time, or you want the date to appear in a non-standard way. Place your date text in the textbox beside the variable selection. What you place in the textbox is what will show in the date textbox on the slide. Use variable date when a presentation date is unknown, or you will give the presentation more than once. Variable will place the current date in the date textbox. With variable, you need to select a format in the dropdown. You can also change the language.

For the footer area, you type the text you want in the footer area in the textbox. Whatever you type in the textbox appears in the

footer area.

There's not much to the slide number. You either check it to show or not show. When checked, the slide number will show up in the slide number area.

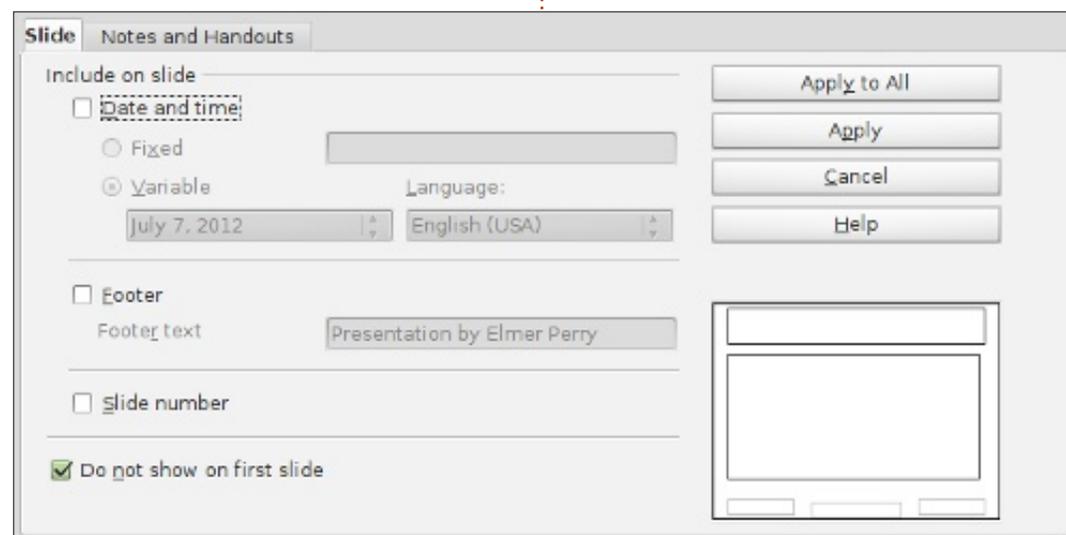
**NOTE:** The date, footer, and slide number areas are disabled on the first slide, the title page.

Click the Apply to All button to apply the settings to all the slides except the title page. Click the Apply button to apply it to only the current slide.

## Impress Styles

Just like in Writer and Calc, Impress can use styles to keep everything uniform. Styles are also a time saver. However, styles are a little different in Impress. Impress only has two different style types, Presentation and Graphic.

An easy way to think about presentation styles is as the styles related to the master pages. You have styles for backgrounds, background objects, outline text, notes, titles, and subtitles. You can modify these styles any way you



want. However, you cannot create new presentation styles.

Graphics styles are styles for objects and text not directly related to the master pages. You can modify these styles in any way you want, and you can create new ones.

Editing of styles is done from the Styles and Formatting dialog. You can open the Styles and Formatting dialog by clicking on the button in the line and filling

toolbar, pressing the F11 key on the keyboard, or by going to Format > Styles and Formatting.

Let's do a couple of modifications to the presentation styles to show how they work. First, enter master view mode, View > Master > Slide Master, and open the Styles and Formatting dialog, Format > Styles and Formatting. Right-click Title in the dialog and select Modify. On the font tab, select a suitable serif or slab font. Maybe make it bold.

Switch to the area tab and change the fill to gradient. Select the first gradient in the list (black to white). On the transparency tab, switch the mode to transparency and the percentage to 50%. Click OK, and you will see the font for the title has changed and it has a semitransparent gradient background.

Now, select Outline 1 in the Styles and formatting dialog. Right-click and modify. All we want to do here is change the font. Click OK. Switch to Master View and you will notice that the font is changed for all the outline levels. This is because each of the outline levels links to the previous one. You can't change the linking, but you can change each of the levels to be different. This cascade effect can be useful, especially with the font in helping to create uniformity.

In this how-to, we learned about creating and modifying master pages in Impress. Master pages are key to helping create consistency in your presentation. We also looked at presentation styles and how they help create the style for your slides. I encourage you to play around with the master page settings and

presentation styles. The presentation styles have 14 different tabs, making them very flexible. You can create a very professional and visually appealing presentation with these tools.

Next time, we will begin work with individual slides.



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