

# OpenOffice.org 2.2: Part 2 – Draw, Impress, Math and Base

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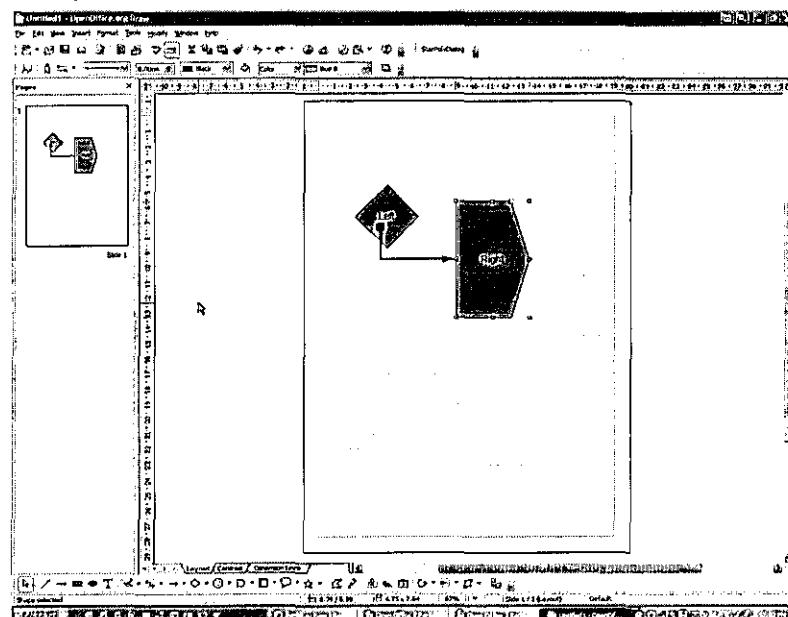
In a previous article I described Writer and Calc, the word processing and spreadsheet modules from the free OpenOffice suite. In this article I will describe the remaining four applications and draw some conclusions about the suite as a whole.

## OPENOFFICE DRAW

Microsoft Office's vector drawing features can be called up from within its applications programs, largely via the Drawing toolbar. The same is true of OpenOffice, but they have also chosen to make more powerful drawing tools available through this separate application. The closest comparison would be to Microsoft Visio, but as this is not available in standard Office packages, users can think of Draw as a handy bonus application.

The Draw screen shows a full page view at the left which can be turned off, and a magnified view in the centre of the screen on which the user can zoom in and out. Drawing tools in the toolbar across the bottom include straight lines, freehand lines, polygons and "smart shapes" with extra handles that allow their settings to be modified. For instance, a rectangle shape can be shifted from sharp corners to rounded corners and back again. There is the same rather limited set of shapes as Microsoft equivalents, and it would have been nice to see some new ones – or better still some generic polygon or star drawing tools like the ones in Illustrator. These shouldn't be too hard to add via the built-in macro system. Alternatively, effective but slightly cumbersome versions of these tools can be downloaded from the web.

**FIGURE 1** OpenOffice Draw



Once drawn, the shapes can be moved, resized, rotated, pulled apart and edited. Individual points can be added and removed, corners converted to curves or vice versa, and shapes and lines grouped together. Existing clip art in vector form can be brought in and broken apart into its components for editing. Bezier handles make it easy to manipulate curves. Finished shapes can be converted to curves,

polygons or bitmaps. Text can be converted into curves for manipulation, and objects can include formatted text extending over several lines. The Fontwork toolbar doubles for the older-style Microsoft WordArt.

Format Area allows users to change the colour of their shapes, make them semi-transparent, give them gradients between one colour and another, or fill them in with a tiled bitmap or a pattern of their own design. Patterns and gradients can be named and saved for later use. A particular set of formatting attributes can be saved as a “graphics style” and re-used on other objects later -- a newish Illustrator feature which I hadn’t expected to find in a free program.

A feature quite new to me was the ability to set “glue points” – points anywhere within a shape where connecting lines will “snap” and stay fixed as the shape moves. Objects can also be made to snap together or to snap to an underlying grid, and dimension lines can be drawn to show the size of objects, although I couldn’t find a way to make them adjust to scale – eg showing a 4 cm line as “400 metres” on a plan.

A small number of 3D objects are available, and flat objects can be extruded or rotated to produce more three-dimensional effects. Double-clicking on a three-dimensional object selects it for rotation through any dimension. A 3D Settings toolbar like the one in MS-Office allows users to change extrusion, perspective and lighting effects.

Draw also uses layers, though these are fairly basic: a single layer can be locked, hidden or blocked from printing, but all objects on any unlocked visible layer are accessible with a mouse click, and there are no visual clues as to what layer you are on. A Master page is used for items which appear on all layers.

A single Draw file can contain several “slides” -- entirely separate images -- which come up as a slide show when the image is saved in HTML. Other HTML-related options include hyperlinking from shapes, form fields, floating frames and animated text -- scrolling, changing fonts or blinking within boxes or other shapes.

Unlike Calc, Draw shows the advantage of not working to a fixed model. OpenOffice has been able to duplicate the functions of the Microsoft Draw module and enhance them with many useful additions of its own. It would benefit from a wider variety of basic shapes, but as it stands Draw is an impressive entry in the field of vector drawing programs.

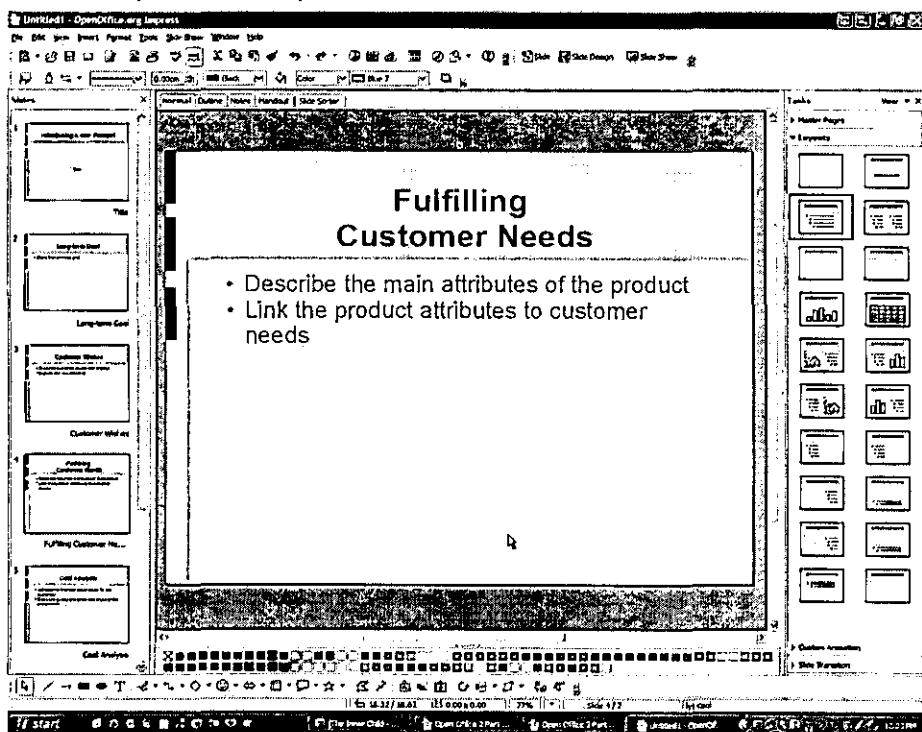
## **OPENOFFICE IMPRESS**

With Impress we are back to the Calc approach of duplicating Microsoft features – the target this time being the presentation package PowerPoint. Obvious differences between the programs are minimal, with the same kind of screen display, right down to the options panel at the right. There are Master Pages, a wide selection of slide transitions, and a range of custom animations that can be applied to objects and text on slides. The same set of layouts is available and slides can be copied and moved around in Slide Sorter view, as they can in PowerPoint. One small difference appears in Outline view – text on slides can be dragged up and down, but not left and right as in PowerPoint; promotion or demotion must be done through toolbar buttons.

Slide shows can be timed to run automatically or triggered by the presenter. Unlike PowerPoint, Impress doesn’t allow the presenter to “write” on the slides while they are on display, but in-show navigation is available, as is the ability to temporarily hide the show and display a black or white screen. Sounds can be triggered by slide transitions or animations.

Slides can be hidden, and objects on slides can be hyperlinked to other slides, files or websites, though not quite as easily as in PowerPoint. Graphic bullets are not supported, and the shortage of clipart is particularly noticeable. If only one could plug the Microsoft Clip Gallery into programs like these! As it is, users who have Word or Excel can call up the Clip Gallery there and then copy and paste the resulting image over to Impress or Draw.

Also conspicuous by its absence is the enormous collection of slide template designs found in PowerPoint. Some more of these can be downloaded from the web; others can be imported from existing PPT files, which Impress reads and writes.

**FIGURE 2 OpenOffice Impress**

Impress shares most of its graphics features with Draw. Draw Macros should work in Impress and vice versa, though neither supports macro recording. With the addition of a few third-party templates, most current Microsoft users will find that Impress meets their requirements just as well as PowerPoint.

## OPENOFFICE MATH

This is a handy module for creating math formulas. As far as I could tell it did everything it was supposed to, producing complex formulas via a simple linear code, but it was hard to see why it requires an independent application of its own. Most users, I suspect, will call it up from within Writer or Impress via the Insert/Object menu, as is done with the Microsoft Equation module on which it is based.

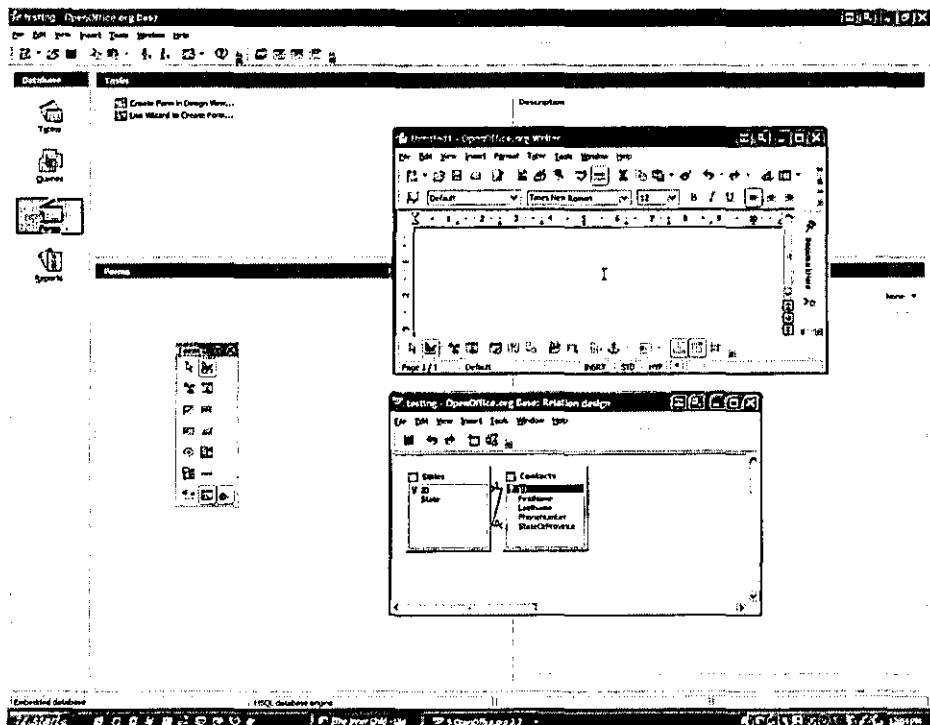
## OPENOFFICE BASE

Spreadsheets and word processor programs are largely interchangeable, but database management systems are not. A faulty database system can cause thousands of dollars worth of damage at the press of a button, so database management is a major programming project that has to be done properly. Persuading people to switch from a known product like Access to an untried one like Base is going to be difficult. For myself I can't see why anyone successfully using Access would want to switch to Base; but new users may find that it meets their needs. There's no reason to think it will fail, but I would want to see any DBMS running successfully for several weeks at least before I trusted my important business data to it.

The similarity to the Microsoft product is less marked than with the other programs. There are four options at the left: Tables, Queries, Forms and Reports – no Pages, Macros or Modules as in Access, though Macros are available through the Tools menu. Tables can be set up in a number of ways and there are fairly extensive templates from which to borrow and adapt fields. Field types cover all the usual options; autonumber, integers, text, date/time, binary and “object” – eg graphics. Fields

can be assigned default values and allocated specific formats. Base can connect to and work with existing Access database files and Excel, Calc or Lotus spreadsheet tables.

**FIGURE 3 OpenOffice Base**



Queries are set up in the same way as in Access, by working through a wizard or by directly modifying settings on the Query Design screen. Relations between tables can be set up beforehand or created within Query Design. Query output is shown on the same screen as the design itself, making debugging very easy. Having created a query, however, there didn't seem to be any way to save the output as a separate file.

Base Forms and reports are created and edited in Writer with the aid of a special Form Design toolbar. They can include subforms and subreports and allow for some pre-designed formats. I didn't see any easy way to include multiple choice lists in forms. There is a simple security system to limit user access. Base also supports SQL and can hook in to the system-level ODBC drivers, making it possible to use it on a network system or web site.

Some useful Access features are missing, but all the essentials appear to be here. As with any database system, though, potential users should test it thoroughly with their own data before making a commitment. However, for a free product Base is extremely impressive, and I would love to see it get the recognition it deserves.

## OPENOFFICE IN GENERAL

Integration between OpenOffice modules is fairly good; you can open any kind of document from within any application, and copy text material and images back and forth between Impress, Calc and Writer. An Insert/Object menu allows the user to incorporate other kinds of media like videos and music. As mentioned above, the same macros can be called up within different modules and will do their best to run whatever module you are in. Mail merge in Writer can draw on tables from Calc and Base, and as indicated, Base uses Writer as a form design system. All OpenOffice modules can export files directly to PDF, with a range of output options available.

Unlike most Microsoft Office programs, OpenOffice opens each file in a new program window; there are no “inner windows” to be cascaded or tiled; but most people are unlikely to notice the difference.

Simple dislike of Microsoft is not a good reason to abandon MS-Office yet. There are still many things MS-Office can do that its rivals can't, especially in the fields of clip art and database management. But if you're concerned about corporate ethics, on a limited budget, interested in moving to Linux, and/or keen to fiddle around with interesting new software, then OpenOffice might repay investigation. And in a few years' time, at their current rate of development, OpenOffice and other free open systems software may well become the rule rather than the exception.