The Cuts and Pastes of OpenOffice.org Productivity

After a lesson on the bare basics of cut and paste, here's how to snip a piece of another application, like a spreadsheet, and embed it into another document where you can continue to treat the snippet as a spreadsheet.

SCOTT STAHL

OpenOffice.org is the mainstay productivity application of the Linux desktop. Proficiency in OpenOffice.org directly equates to productivity in professional life. The main components of OpenOffice.org consist of the Writer word processor, Calc spreadsheet and Impress presentation designer. This article demonstrates how to share information between the different applications starting from the simplest of editing.

The most basic editing function is copying and moving text around in a document. The process of manipulating text is referred to as cutting and pasting, or copying and pasting. Cutting or copying and pasting of text is a simple process. Here is the copy process in a nutshell. Start up OpenOffice.org Writer and open a sample document. If you don't have any sample documents, write a few paragraphs, even if they're just nonsense.

THE HIGHLIGHTS
Highlight some text that you want to copy or move. Here's how to highlight portions of a document, spreadsheet or what have you. Highlighting, or selecting text, is the way the user communicates to the computer what text to act on. You can highlight text with the mouse, keyboard or both.

If you want to use the mouse, move the pointer to where you want to start the selection. Click and hold the left mouse button, then drag the mouse pointer over the text you want highlighted. The text turns black as you progress. It is important to note that you can drag the mouse forward or backward with equal facility.

Keyboard highlighting is performed using the keyboard, of course. Position the cursor where you want to start highlighting. Use the arrow keys that are found on the lower right of nearly every PC keyboard in existence to move the cursor. Once the cursor is in place, hold down the left Shift key. We use the left Shift key simply because it is easier to use two hands for this operation. Now that the Shift is held down, use the arrow keys to move the cursor. The text will turn black as you progress.

Keyboard highlighting has some neat short-cuts for quickly selecting text. Hold down the Ctrl and Shift keys while you move the cursor with the arrows in order to select entire words at a time. While holding down the Shift key, use the Page Up/Page Down keys to select large blocks at a time. Use the Ctrl-A key combination to highlight the entire document.

There is a small drawback to highlighting with the mouse. Once you get to the endpoint and release the mouse button, you can no longer increase or decrease your selection. This is where keyboard highlighting comes in handy. Try selecting some text with the mouse, and then use the keyboard to add to the highlighted text. The keyboard also can give you finer control over what is selected.

COPY OR CUT AND PASTE
Given any combination of the above methods of highlighting text, highlight a section of the text that you want to copy. Now, hold the Ctrl key while pressing the C key at the same time (Ctrl-C). The text is then copied to a temporary place called the clipboard. Move the cursor to

where you want a copy of the text. Then press the paste shortcut sequence, Ctrl-V. A copy of the text is now in the new location.

If you want to move text, you have to high-light the text you want moved, cut it from the old location, and then paste it in a new loca-tion. Try this with your sample document. Highlight the text you want to move. Then press Ctrl-X to cut that text. You should see the text disappear, but it was moved into a tempo-rary place known as the clipboard. Now move the cursor to a new location where you want to move the text. Press Ctrl-V to paste it there. *Voilà*—you have just cut text from one location and pasted it into another.

CONTROL PLUS

The Ctrl-then-C key combination is referred to in print in many ways, including Control-C, Ctrl-C, cntrl-c or even the obscure ^C. The point is simply that you hold down the Ctrl key and then press the C key, or whatever other key is necessary for your Ctrl combination.

Other key combinations are written the same way. Here is a table describing the cut and paste keyboard shortcuts. The mnemonic at the end may be useful, but it is by no means essential that you memorize the combinations by the sometimes obscure mnemonics (Table 1).

THE CLIPBOARD

You may be wondering what it means that "The text is then copied to a temporary place called the clipboard." The clipboard is best thought of as a magical place where you can store things and retrieve them later. The catch is that you can put only one thing in the clipboard at a time. As we will see later, the clipboard is

Table 1. Cut and Paste Keyboard Shortcuts

Key Sequence	Action	Mnemomic
Ctrl-C	Copy selected text	Control Copy
Ctrl-X	Cut (delete) selected text	Control eXcise
Ctrl-V	Paste buffered text	Control View
Ctrl-A	Select all text	Control All
Ctrl-Z	Undo last action	Control Zinger

capable of handling much more than merely text, and the clipboard is not limited to OpenOffice.org. Text placed in the clipboard is available to any other application in KDE or GNOME. It must be noted, however, that cer-tain applications cannot handle the clipboard for one reason or another. In that case, nothing happens when you try to paste the contents of the clipboard into an incompatible application.

The primary purpose of cut and paste may be for editing, but the real beauty of the system is apparent only when you need to aggregate small amounts of data from different document types in one place. If you need many different types, or simply a lot of data types, in one document, OpenOffice.org has a Master Document feature that is beyond the scope of this article.

All OpenOffice applications can cut and paste data beyond simple text. In fact, OpenOffice.org is designed to share program functions wherever

it is possible to do so. Because of this function sharing, the way some things get pasted may surprise you.

A common source of data is numeric, like that found in Calc, the OpenOffice.org spreadsheet. If you cut or copy a selection of spreadsheet cells from Calc and place it into another OpenOffice.org application like Writer, what you get looks like a table representation of the spreadsheet data. But what you really are placing in your document is a small version of Calc.

It is important to note that the data you paste in the Writer document is *not* connected in any way to the original document. Any changes you make to the Calc data that is pasted in your Writer document will *not* be reflected in the origi-nal source Calc spreadsheet. Any changes you make in the original Calc spreadsheet will not be reflected in the data you pasted from that spread-sheet. Once the Calc data is in the Writer docu-ment, it no longer has any connection to the orig-

inal spreadsheet.

You still can manipulate the spreadsheet data you pasted into the document almost as if you were using the Calc spreadsheet. Simply double-click the pasted area of Calc data, and you'll see it transform into a spreadsheet-like mini-window, with rows, columns and cells. Even your toolbars at the top of Writer should change to include Calc tools.

Here is where caution is warranted. When you are finished modifying the Calc data, click outside the area on a blank area of the document or on a spot where there's regular text. This exits the special Calc mode and returns the data to the form of a table. Writer will display the Calc information exactly the way you

Choosing a feature from the Edit menu, or a quick click of the shortcut buttons, does exactly the same thing as the keyboard shortcuts. But wait, there's more!

Look closely at the paste shortcut button on the toolbar (it looks like a clipboard with some paper attached). There is a little green arrow in the top-right corner. That arrow is there to let you know you have more options to choose from. You can access the other options by what is called a long click in OpenOffice.org parlance. Click on the toolbar button, but hold the mouse button down until the options drop down in the form of a menu. Don't worry about trying to get the mouse on the green arrow; it works if you click anywhere on the

- OpenOffice.org Spreadsheet

- GDI Metafile

- Bitmap

- HTML (Hypertext Markup Language)

- Unformatted text

- Formatted Text (RTF)

The OpenOffice.org Spreadsheet choice is the default behavior you see when you do a simple cut and paste operation. Remember, this is the choice that brings all the features of Calc along to

All OpenOffice applications can cut and paste data beyond simple text.

left it. If you scrolled down a column so that no numbers appear in the spreadsheet, no numbers will be displayed in Writer. This behavior is confusing at first, but OpenOffice.org was designed this way to make your life easier in the long run. The important lesson here is that the default cut and paste behavior is actually to bring a part of the application along with the data.

Now, we look at ways to modify the way to paste objects or text. If you have ever used a computer-based word processor, you probably are aware that cutting and pasting can be accomplished by using more than the keyboard or mouse. We have ignored the menus until now because they function a bit differently than people may be used to. Don't worry, the basics are the same as other programs.

icon. The same options are available from the Edit menu by choosing Paste Special.

Sometimes you do not want to bring all the full-blown Calc features along for a few numbers or some other trivial bit of information. Let's look at the Paste Special features that are available for pasting a small column of numbers from Calc into Writer. The Paste Special menu is aware of the type of data on the clipboard and presents only valid options for that data type. Our column of numbers consists of simple text and thus has the most features available for use. Look at the following list of choices on the Paste Special menu. Don't worry right now if some of the jargon does not make sense, or if the list and order varies depending on the version of OpenOffice.org you're using:

your Writer document.

GDI Metafile is probably the most complex thing on the menu. Fortunately, you need to know only what it does, not what it is. When you paste a GDI Metafile into a document, an image of the clipboard contents is the result. The GDI Metafile image is scalable, meaning that you can make it appear larger or smaller, without losing image detail. Pasting the GDI Metafile type works especially well in the Impress presentation application.

The third option, Bitmap, is a rudimentary graphics format. Bitmap graphics do not scale well and are best left at their default pasting size. The benefit of a bitmap is that it is a widely used format. Nearly every other non-OpenOffice.org application can recognize and use a bitmap.

The last three options are all variations on simple text objects. In each case, you get the text with special formatting codes. Hypertext Markup Language (HTML) is the lingua franca of World Wide Web pages. HTML is designed to look good on your computer Web browser screen and may not be suitable for printed documents. The Unformatted Text option is the lowest common denominator. Pasting unformatted text is the exact same thing as typing it in yourself. The last option, Formatted Text, uses another widely known and understood document format called Rich Text Format (RTF). Rich Text is a nice way of preserving the table structure along with the data in our example, so that any cosmetic changes you made to the data in the spreadsheet should appear when you paste the data into the document.

Using one of the features from the Paste Special menu usually gives the effect you desire.

LIVE DATA CONNECTIONS

When you cut or copy data from one application and paste it in another, the copy you pasted is no longer aware of the original data. It has been cut off from its original source and won't change to match any changes you make to the original source.

Data in a document that is still connected to its source is generally referred to as live data. In OpenOffice.org for Linux, cut and paste does not give you live data between applications, but there are ways to achieve this feature.

The easiest way to work with live data is to use the OpenOffice.org Master Document type. Instead of trying to shoehorn data types to fit, simply assemble them under one roof. You then can work on each piece separately or even delegate author duties to other people. When all the pieces are complete, the whole thing can be printed for a professional appearance. This approach is not at all intuitive, and it has some unfortunate limitations at this point. For example, you cannot make a spreadsheet a part of a master document, so this does not let you insert a live link to an external spreadsheet, such that any change you make in the spreadsheet is reflected in the master document. Master documents currently are designed more for constructing books, where the sub-documents (chapters, for example) are still only text documents.

A more expert approach to working with live data is to use a database to house the information. OpenOffice.org comes with a multitude of features that allow manipulation of database data. Admittedly, these features are generally for the power users of OpenOffice.org. This topic deserves its own article, as it is more complex.

As we have seen, cut and paste can be as simple as a basic editing feature or a gateway to much more complex documents. We started with the basic features that will allow you to become productive in OpenOffice.org immediately. Using the basic building blocks, we then progressed to using more complex manipulation of data types. Hopefully, seeing these tools will encourage you to branch out beyond correcting mistakes and reordering thoughts to unleash the productivity found in many other OpenOffice.org features.■

Scott Stahl is a professional systems administrator and Linux instructor with more than 15 years of experience. After writing technical documentation all of those years, he finally decided to write things that someone might actually read.

Tip **Some people really need live data, so they can paste a copy of some numbers from a spreadsheet into a document, and expect the numbers in the document to reflect any changes made to the spreadsheet. EIOffice does this extremely well. If you are open to using a non-free office suite in addition to, or instead of OpenOffice.org, visit http://www.evermoresw.com to see if EIOffice could be right for you.**