## Online office suites

# WEB WORKERS

A mobile office without a laptop? No problem – a new generation of web applications converts your browser into a word processor or spreadsheet. **BY PETER KREUSSEL**

**E**arly web applications weren't convenient – even trivial changes meant reloading the page, which could take a couple of seconds until the server returned the data. It was almost impossible to work at normal speeds, and there were limitations to the complexity of the applications.

About two years ago, **AJAX** was introduced to speed up online applications. Part of the application logic is implemented in JavaScript and runs in the browser. AJAX doesn't need to talk to the server for many functions, which decreases delays. Even if it needs to request data, it does not automatically mean reloading the page, since the connection between the server and the browser is asynchronous.

Today, AJAX applications are available for many office chores. In addition to word processors, there are spreadsheet applications, calendars, and graphics tools. Are the new applications fast and stable enough for serious work? And can you work from an Internet café?
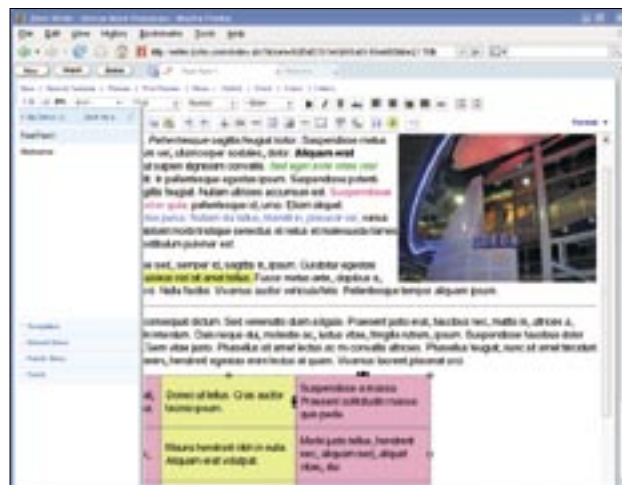
## Words Apart

Imagine you are on vacation somewhere, but you need to work on your script for

a presentation. Finding a computer to work on is no problem, but you forgot that the commercial office suite running on the foreign operating system on that computer would be unable to open your OpenOffice documents. Just launch a web browser and surf to the Zoho Writer website [1]. The Zoho Writer web application can handle both the current OpenOffice ODT file format, and the older SWX format.
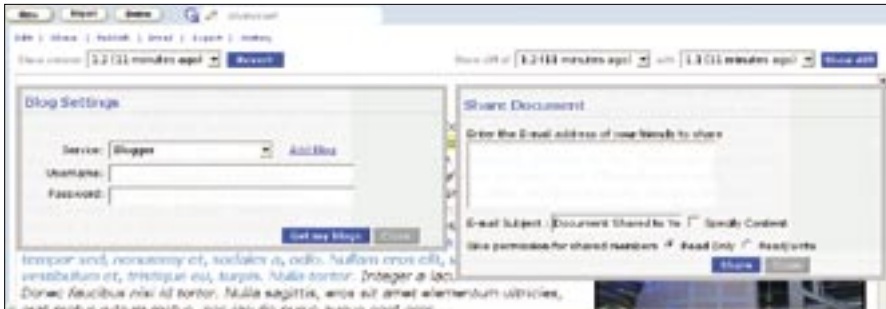
After loading your file, you could export it to Microsoft Word format, however, there is no need to do so. Zoho Writer has a number of formatting functions in the browser, including the standard palette of bold and italics, highlighting, and even graphics and tables (Figure 1). Zoho Writer pages can include headers and footers. There are a couple of technical restrictions with

respect to your choice of font – the browser can only display fonts installed on the local machine, so the font list will only show you common fonts that you will find on almost any system.

Although Zoho Writer can do amazing things for a web application, it obviously can't match the feature scope of a desktop program. However, it can create a preliminary version of a document that



**Figure 1: The champion: The Zoho Writer online word processor offers a variety of formatting functions, and it can create tables and embed graphics. The import function for ODT-formatted documents is extremely reliable.**

**Figure 2: Advantages in comparison to desktop applications – Zoho Writer forwards texts directly to blog services and lets users collaborate with other Zoho users on the Internet.**

you can then polish in OpenOffice at your leisure. Even if you open an Open-Office document, edit it in Zoho Writer, and then export it back to ODT format, much of the original formatting will be kept. Besides OpenOffice or Word file format, Zoho Writer can export documents to PDF and as HTML pages.

Zoho Writer is more than just a limited replacement for a word processor; it is also a useful WYSIWYG HTML editor with both a source view and functions that give the user the ability to manually enter HTML code at the cursor position. At the same time, you can forward or mail the HTML text to various blog services like Blogger, WordPress, and Live-Journal (Figure 2).

Select the *Email | Email in* menu item to enter the address for which Zoho Writer accepts email texts for your account. You can share documents with other users without needing to understand the underlying technology. Version control keeps your data safe in collaboration scenarios where many users work on – and save – the same document.

The terms and conditions of use [2] are probably the biggest drawback right now. Although Zoho Writer Beta is free as of this writing, the developers reserve the right to make the service commercial in the future. As an alternative, you might like to try ajaxWrite [3]. Another option is Google Docs [4], which was originally tool called Writely that Google acquired six months ago.

Google Docs can't offer the same feature scope as Zoho Writer, but it does support typical formatting, like bold and italics, font and background colors, and graphics and tables. The application can read the current OpenOffice ODT format, but you may lose more formatting.

Google Docs can also display and export HTML source code and export doc-

uments in HTML, RTF, Word, and Open-Office format, as well as PDF. The *Publish* function gives users the ability to publish documents on the Google Docs website. Like Zoho Writer, Google Docs can forward your work directly to blog services and has an email inbox for incoming documents.

The feature-scope of ajaxWrite [3] is meager in comparison. For the most part, it simply supports the kind of formatting that can occur in RTF documents: fonts, sizes, and colors, along with bold, italic, and underlined text. Documents can be saved in Microsoft .doc format on your own machine.

AjaxWrite also lacks the practical combination of online application and data source, along with the ability to share files directly from within the application. On a more positive note, the interface is intuitive, with pull-down menus that resemble a desktop application, thus reducing the learning curve for new users (Figure 4).

## Calculator

Many office chores involve calculations of some kind. For years, spreadsheets have been an essential part of any office suite, and now online solutions are starting to appear.

Google Spreadsheets [5] demonstrates the typical Google-style spartan design that we all know so well. Clickable elements are indicated by blue underscores or plain buttons, just like in

the early days of the Web. The spreadsheet area looks just like OpenOffice Calc or many other spreadsheet applications. Dragging the mouse on column or row borders changes the column or row size, just like in a desktop program. You can also hold down the left mouse button and drag to select cells.

At the top of the window, you will notice a couple of buttons for formatting, along with three tabs: *Format*, *Sort*, and *Formulas*. Formatting functions are grouped below *Format*. You can assign typical numeric formats to cells: the number of decimal places, various currencies, date, or text only. Text can be italic, bold, or underlined, and there are even a couple of fonts to choose from. Font and background colors can be modified, as can the alignment and font size, and you can divide or combine cells.

In comparison with desktop applications, whose feature-scope has grown considerably over the years, this may not sound very impressive. What you have to remember is that the interface for a web application like Google Spreadsheets is HTML-based. AJAX removes the need to reload the page; if the application needs to retrieve data in the background to reflect a change, users will simply see an *Updating* status message in the top left corner of the screen. This said, being HTML-based does mean a few restrictions. For example, the font list has just six entries, which is typical of a web application.

Google Spreadsheets can easily compete with its competitors with respect to



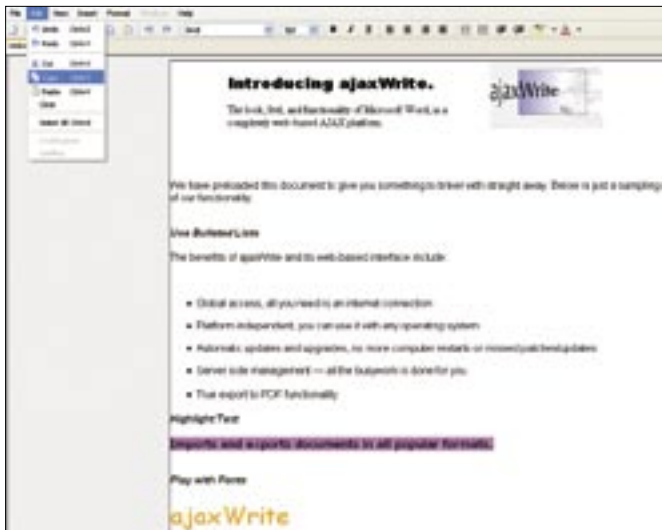**Figure 3: Writely is now known as Google Docs.**

**Figure 4: ajaxWrite has a restricted set of features, but its controls resemble a desktop application.**
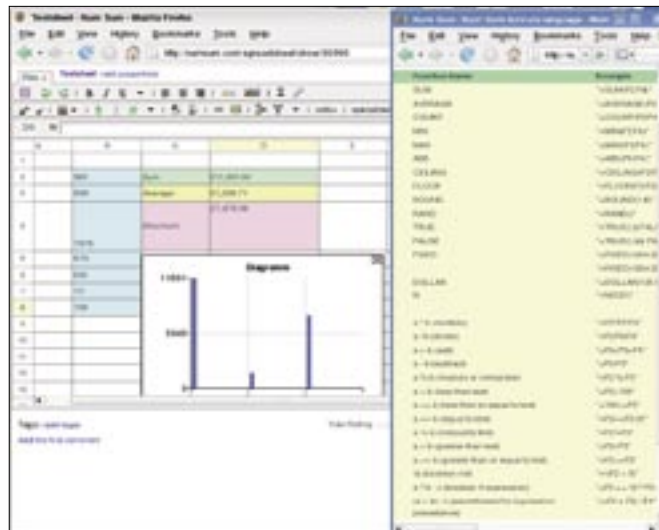


**Figure 6: NumSum is designed for simple calculations and does not have the staying power of Google for more complex tasks.**

calculation power. You can click *more* below the *Formulas* tab to pop up a dialog with most of the functions you would expect from a desktop spreadsheet. Among other functions, Google Spreadsheets offers mathematical operations such as sines and logarithms; it supports formulas from fields such as financial math and statistics, and it can handle Boolean operators or date manipulation functions. Whatever you need to calculate, Google Spreadsheets can help you do so on most browsers.

Google Spreadsheets is fairly slow to react to user input. NumSum [6] proves that web applications can be quicker; there is only a slight delay while NumSum calculates. The interface is less minimalistic than with Google, and NumSum uses practical docks at the top of the workspace for cases where users can select from multiple parameters (like



**Figure 5: Powerful calculator – Google Spreadsheets has as many calculation functions as a comparable desktop application.**

numeric formats). See Figure 6. Also, NumSum can visualize data in diagrams.

NumSum does not have much in the line of calculation features right now, and users have to do without wizard-based categorizing and auto-entry for functions. The free version will have a restricted set of features after completing the beta phase, so users will be better off sticking with Google Spreadsheets.

## Neat Design

Imagine you need to work on a presentation while you are away from the office, but the images on your digital camera are your major concern. Some of them are overexposed or underexposed, and the subject is not centered in others. The computer you are working on does not have an image manipulation tool.

There is no free solution, but a commercial application, NexImage, shows the technological potential for implementing a bitmap editor as a web application. The developers license NexImage as a component of their content management system, but also offer a free trial version [7].

The online image manipulation tool does not have much in the line of filter effects. However, it handles basic bitmap editing functionality, like crop-

ping or gamma correction, as well as Gimp or Photoshop. Often, these features can convert snapshots into something usable. NexImage supports layers and it also has a text tool.

If you need to draw sketches, ajax-Sketch has all the major drawing tools that Inkscape can give you on the desktop and also uses the SVG file format.

## Licensing Issues

The new generation of web applications seems to be keeping Sun's possibly premature promise: "The network is the computer." The California-based giant had a vision many years ago of network-based applications ousting desktop programs, and Sun's Java Runtime Environment has provided the basis for pro-
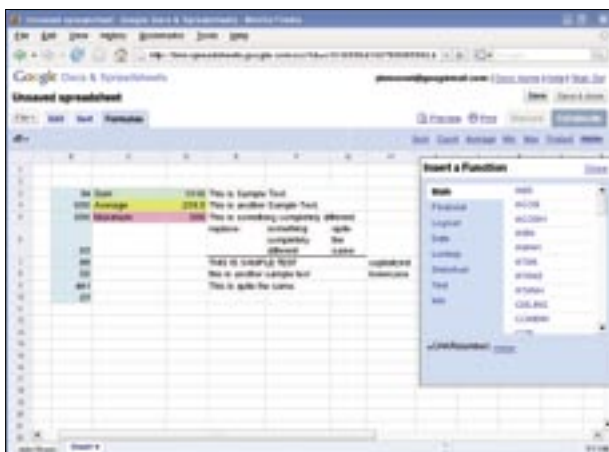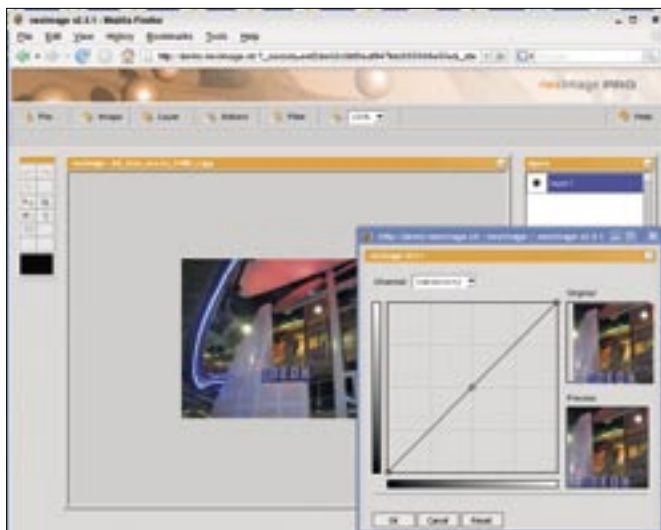
### INFO

[1] Zoho Writer: *http://www.zohowriter.com*

[2] Zoho Writer license: *http://www. zohowriter.com/terms/Terms.html*

[3] AjaxWrite: *http://www.ajaxlaunch.com/ajaxwrite*

[4] Google Docs word processor: *http://docs.google.com*

[5] Google Spreadsheets: *http://spreadsheets.google.com*

[6] NumSum online spreadsheet: *http://numsum.com*

[7] NexImage online bitmap editor: *http://demo.neximage.com*

[8] AjaxSketch online drawing program: *http://www.ajax13.com/en/ajaxsketch*

[9] Thinkfree Office (Java office suite): *http://www.thinkfree.com*

**Figure 7: Web-based photo shop – NexImage proves that complex applications like bitmap editors can be implemented with a little help from AJAX.**
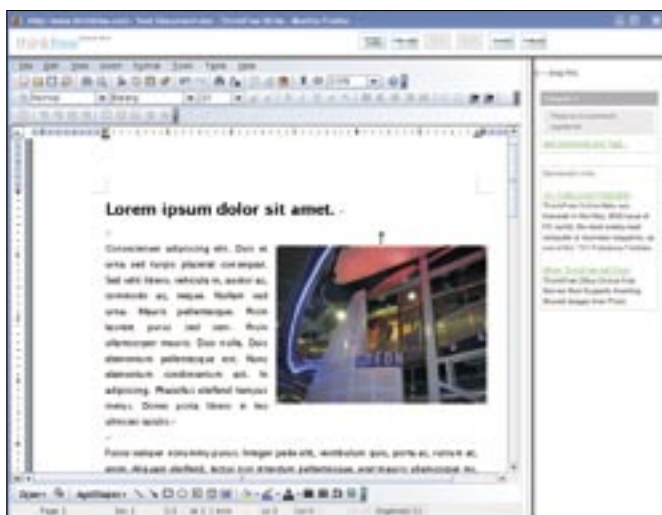
gramming multi-platform capable applications for free.

There is at least one Java Office suite that outshines AJAX office applications. Thinkfree Office runs as a Java applet in a browser and can be used on any machine with an online connection, providing the web browser has Java support. Launching the application requires a multiple-megabyte download.

Thinkfree Office [9] includes a word processor, a spreadsheet, and presentation software, which almost matches the performance of OpenOffice components. The applications are free for use now, but developers can restrict free access later.

Java technology is free, but not open source. Many Linux developers and users avoid Sun technology because it's not open to development. Unfortunately, this also applies to a couple of the AJAX applications; NumSum and Zoho Writer are both beta, and users are unlikely to find free and unrestricted versions after development is completed. Google's application will stay free, but development is firmly locked behind closed doors. ■



**Figure 8: The Java-based Thinkfree Office outshines AJAX applications with respect to usability and performance.**