



Adobe Reader 8.1 vs. Xpdf and Evince

PORTABLE POSSIBILITIES

The creator of the PDF format, Adobe, has released Adobe Reader 8.1. Does the proprietary display program offer more than free software alternatives Xpdf and Evince? **BY ERIK BÄRWALDT**

The Portable Document Format (PDF), based on the PostScript page description language, has established itself as a standard for cross-platform document publishing, and readers are available for any popular operating system. That said, the PDF format is not designed for publishing documents that anyone can read.

Pre-press is another important area in which PDF is deployed. Professional Postscript printers and CTP machines process PDF documents directly, with the use of preflight to check the layout of a PDF document before publishing. The developers of the PDF format, Adobe Systems, had publishers and printing companies in mind when they designed PDF and the Internet was still new.

At the same time, Adobe made sure that the new product was available to most computer users. Acrobat Reader [1] was developed as a free display tool for

PDF files and catered to all popular operating systems at the time. Acrobat Reader for DOS version 1.0 was released in 1993, with a version for Macintosh, IBM OS/2, and other operating systems.

Because Acrobat Reader was distributed free of charge and available for a range of platforms, the PDF moved ahead of competition from the typical word processing formats of the time. Adobe landed another coup when it developed reader plugins for popular web browsers, allowing users to view PDF documents published on the burgeoning Internet directly in their browsers without having to launch an external tool.

Although growth in software development is amazingly dynamic, Adobe continues to offer its Adobe Reader product free of charge for all major platforms, but as a proprietary tool, which inspired development of the free PDF readers Xpdf [2] and, later, Evince [3]. Whereas

Xpdf, one of the older free PDF reader programs, still uses a Motif interface, Evince integrates seamlessly with the Gnome desktop. Besides the viewer function, Xpdf includes xpdf-utils, which give users the option of converting PDF documents to Postscript. In contrast, Evince has a whole bunch of useful, supplementary features, such as the ability to fill out forms or copy document content to the clipboard. At the same time, Evince can display Postscript and DVI documents, in addition to PDF.

The greater the feature scope of Evince, the more Adobe Reader lagged behind on Linux, especially considering that each new version needed increasingly more resources. For example, Adobe Reader occupies more than 100MB of disk space, and loading and viewing of larger documents is slow. Thankfully, Adobe seems to accept user feedback, and the new 8.1.1 version of the Reader for Linux not only includes a revamped look and a more attractive GUI, it also brings many software improvements under the hood.

As you might expect, the new Reader is not available from the repositories of

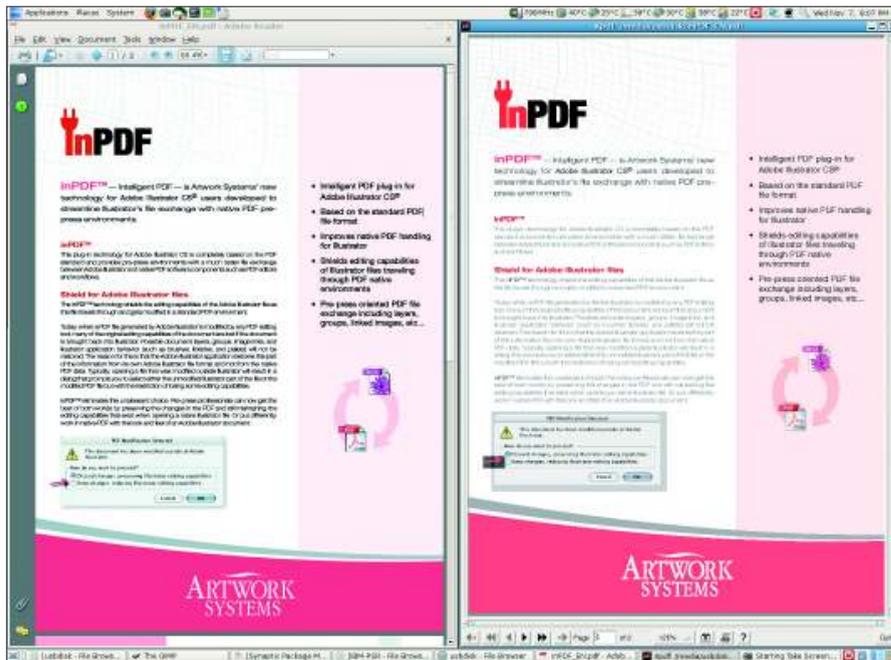


Figure 1: Xpdf likes to keep things uncluttered.

the leading Linux distributors, but only from the Adobe website [1]. The download size is about 50MB. One of the biggest changes is visible from the install. Adobe Reader versions up to and including version 7.0.9 were available as ZIP archives only; users had to first unpack and then install before running an executable script. Now, Adobe offers RPM and DEB binaries of the reader, giving users on many distributions a point and click installation option.

When launched, the installation routine drops around 120MB of data onto your disk. Running on Gnome, the application creates an *Adobe Reader* item in the *Applications | Office* menu (this is just *Office* on KDE). Users with alternative desktops will typically need to create their own program launchers.

Speed

If you are familiar with older versions of Adobe Reader, you will be surprised how fast the application is the first time you launch it. Adobe has kept the license dialog on initial launch, but apart from this, the software has a completely new look. The GUI is tidy, with a single row of buttons for controlling the display and the menubar. The elements previously grouped at the bottom of the window have now been integrated with menus or with the buttonbar at the top. A couple of new buttons appear on the left of the program window; their appearance can

change depending on the length and content of the document.

Compared with Xpdf and Evince, Adobe Reader is still fairly slow, but whereas the predecessor, v7.0.9, took about 20 seconds to launch on a 1.2GHz machine, the new version reduces the wait by about half. The time required to load a text document of several hundred pages with many graphics is another surprise and far shorter than previously.

The new Reader loads documents faster than the programs Xpdf and

Evince. Whereas the latter can still keep pace with files mainly comprising text and just a couple of graphics, the new Adobe Reader easily outpaces its free competitors with larger documents containing many graphics or images. Adobe Reader also handles go-tos or scrolling in the text far faster than its free competitors. All three candidates handle typical scale, rotate, and select commands at about the same speed, but Xpdf reminds users of the days of DOS with its outdated Motif GUI, and it has the most unconventional controls of all three.

Xpdf does not have any menubars. Basic steps such as loading files, saving, rotating, or quitting the program are triggered by right-clicking and selecting an item in a spartan menu that pops up in the program window. Only a couple of functions, such as go-tos and scaling of the PDF document, use the iconbar at the bottom of the Xpdf window. The iconbar also has a simple search function and a print function. Xpdf does not support features such as form manipulation or modification, if permitted by the author of the PDF document.

On the other hand, the Xpdf software supports keyboard controls for the most part. Users who are familiar with the keyboard shortcuts can improve speed by doing without a mouse. In a multiple-page document with headings, Xpdf displays the table of contents on the left of the main window. Clicking on a heading

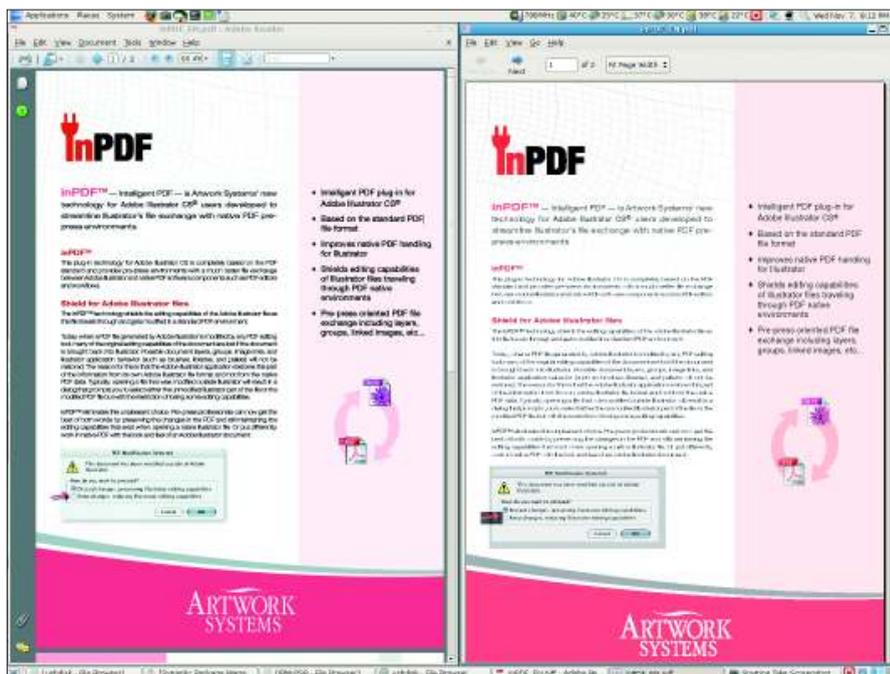


Figure 2: Evince also has an uncluttered program window.

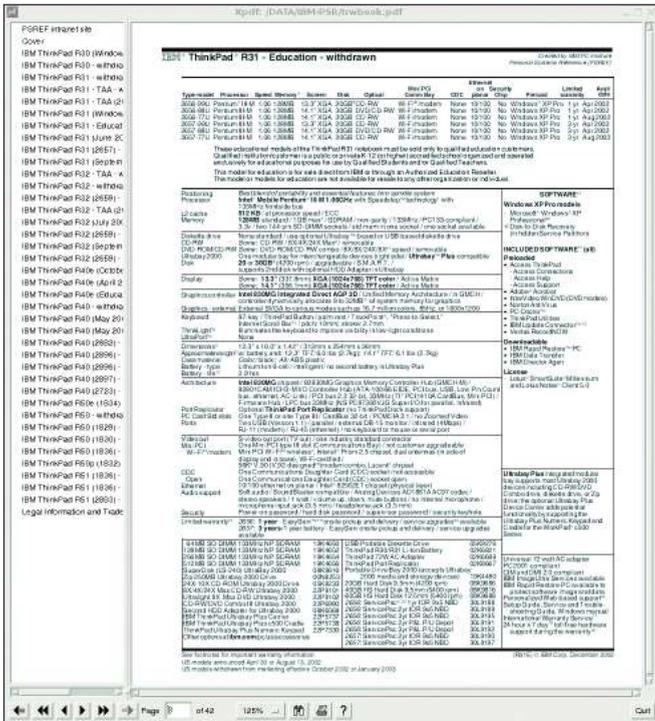


Figure 3: Xpdf's rendering of complex documents (right) is less realistic than Acrobat Reader's (left).

takes you straight to the page in question (Figure 1).

Evince has functionality similar to Xpdf, plus a couple of additional features, including the ability to fill out forms. If you enable the *Side bar* function in the *View* menu, Evince will show you a TOC or thumbnails for the document.

Left-clicking a thumbnail takes you to the page (see Figure 2).

Adobe Reader has the biggest collection of custom functions. Users can click the icons in the main window to display tables of content and thumbnails. Also, Reader has a limited scope for manipulating documents, such as viewing file attachments and viewing and editing comments; users can click on the paper clip and speech-

bubble icons, respectively, at the bottom of the main window for these two features.

Acrobat Connect – another innovation – even allows users to share Adobe Reader documents with other users connected by means of the Connect service. For this to happen, Acrobat Connect sets up its own “rooms” in which the initiator can invite other users to assemble for a virtual meeting.

Although the read and spell-check functions do not currently work

on Linux, Adobe has already added menu items to support these features.

Clarity

The display quality of the documents is an important criterion for users. Again, the new Adobe Reader scores points

across the board. Although all three test candidates have no trouble displaying simple PDF documents that do not contain complex graphical or layout elements, the two free apps have difficulty displaying more complex PDF docs.

I used a PDF document created by Adobe PDF Library v7.0, which generates files in PDF v1.5. The document contains high-resolution images and overlaid text, along with transparent photos, special layout elements, and shading. Although Xpdf and Evince use different rendering engines to display the documents, the errors are the same with complex PDF files.

The free viewers display graphical boxes with a broad black border instead of shadowing. Xpdf and Evince also have difficulty with images that transparently overlay text elements; they display the image, but without transparency, which can seriously affect readability (Figure 3).

Text boxes over graphics with backgrounds that should be transparent are displayed as white or dark boxes by the free PDF readers. In my example (Figures 3 and 4), a dark box is shown around the red arrow.

The original Adobe Reader is the only program capable of displaying complex documents correctly, and it now achieves the same file-loading speed as the free candidates.

Conclusions

If you need a tool for viewing documents mainly comprising text such as guides or HOWTOs, all three programs will work. Professionals who use PDF documents with many graphical elements and a complex layout for presentation purposes will find no alternative to Adobe Reader. The original Reader avoids rendering errors with more complex layout elements. At the same time, the new version 8.1.1 shows evidence of careful development, including a more usable and attractive GUI. It's faster, and it offers features that the free readers lack. ■

INFO

- [1] Adobe Reader (download): http://www.adobe.com/products/acrobat/readstep2_allversions.html
- [2] Xpdf: <http://www.foolabs.com/xpdf/>
- [3] Evince: <http://www.gnome.org/projects/evince/>

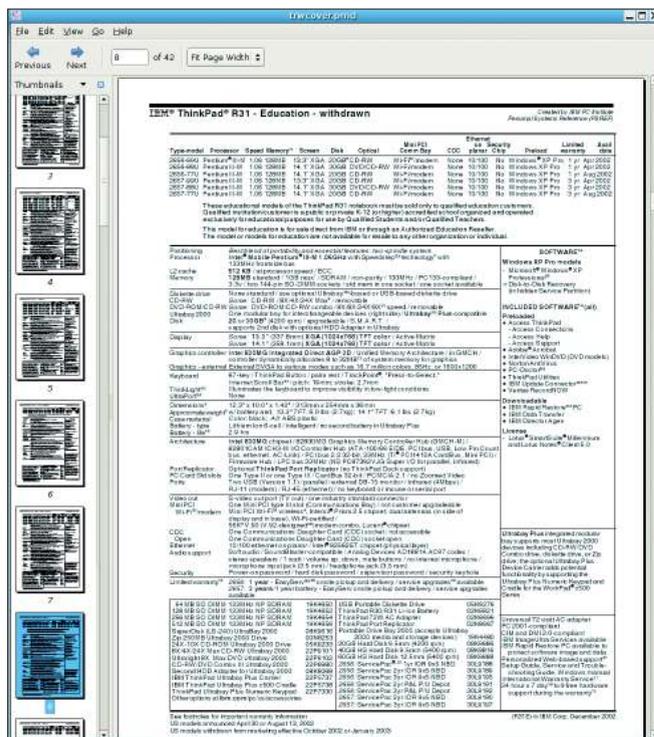


Figure 4: Evince (right) also fails to display complex documents as well as Adobe Reader (left).