

# PDF HACKS™

*100 Industrial-Strength Tips & Tools*



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HACK  
#41

## Maximize PDF Portability

PDF version differences can affect you and your readers.

To best serve your readers, you should ensure that your PDF is compatible with their viewers. What PDF viewers are they running? Assume that they have at least upgraded to the *previous* version of Acrobat/Reader (or another, compatible viewer). PDFs created with the *newest* Acrobat might be incompatible with previous versions. A little care can prevent inconveniences to your readers such as the one shown in [Figure 4-10](#).

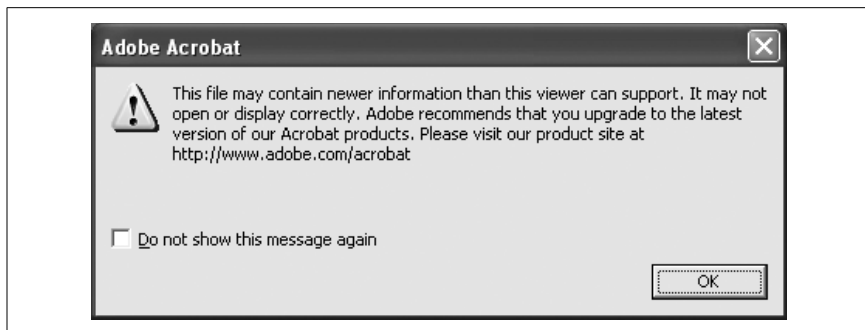


Figure 4-10. Messages that annoy readers

## PDF Versions Overview

With each new version of Acrobat, Adobe introduces an updated version of the PDF specification. They go together, as shown in [Table 4-5](#).

Table 4-5. Acrobat version information

Acrobat version	Year introduced	PDF version
3.0	1996	1.2
4.0	1999	1.3
5.0	2001	1.4
6.0	2003	1.5

In many cases, an older viewer still can read a newer-version PDF (although the viewer will complain). Its behavior depends on which new features the PDF uses. Which viewers implement newer features? Here are some highlights, selected for their bearing on mass distribution. For complete details, consult the PDF Reference, Versions 1.3, 1.4, and 1.5.

*PDF 1.3 (Acrobat 4) introduced:*

- Digital signatures
- File attachments

- JavaScript support
- Logical page numbering

*PDF 1.4 (Acrobat 5) introduced:*

- Additional 128-bit encryption option
- Additional JavaScript trigger events (document close, will save, did save, will print, did print)
- Enhanced interactive forms

*PDF 1.5 (Acrobat 6) introduced:*

- Additional file compression options
- Additional encryption options

An older viewer can simply ignore many of the things it doesn't understand. The showstoppers are the compression or encryption features, because the viewer can't show the document if it can't read the streams.



If your PDF relies on newer JavaScript or forms features to work properly, prevent older viewers from opening your PDF. Determine the minimum PDF version your document requires and then apply the corresponding encryption using an **empty password** [Hack #52]. Older viewers simply won't be able to read it.

## Create Compatible PDFs

Out of the box, Distiller or *PDFMaker* yields PDFs that are compatible with the previous version of Acrobat. No problem.

When you open a PDF in Acrobat, modify it, and then save it, your PDF's version is upgraded silently to match Acrobat's. It is no longer compatible with the previous versions of Acrobat/Reader. This happens regardless of whether your PDF uses any of the new features.



Install older versions of Acrobat Reader and test your PDFs, if you are worried about how they'll look or function. Download old installers from [http://www.adobe.com/products/acrobat/reader\\_archive.html](http://www.adobe.com/products/acrobat/reader_archive.html) or <http://www.oldversion.com/program.php?n=acrobat>.

One solution is to use the Reduce File Size feature in Acrobat 6 (File → Reduce File Size... → Compatible with: Acrobat 5.0 and later), which enables you to also set the compatibility level of the resulting PDF. Another solution is to use the PDF Optimizer feature (Advanced → PDF Optimizer...)

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and set the “Compatible with” field to “Acrobat 5.0 and later.” A third option is to [refry your PDF](#) [\[Hack #60\]](#).