

# Correcting Proofs via PDF Commenting

The “paperless office” often works better in theory than the real world, but it is becoming feasible to mark text corrections electronically. The free Adobe Reader provides a convenient means for doing so via “PDF Commenting” (also known as “Acrobat Commenting”) once this capability has been enabled for a given PDF.

The basic commenting process is quite simple. You open the enabled PDF with Adobe Reader version 7 or later and use the Note Tool to make little “sticky notes,” where you describe the correction. A little “speech balloon” icon indicates where your note goes on the PDF page, and after the note window has been closed you can click on its icon to re-open the window for review or revision; you can also reposition the icon by dragging it with the mouse. When you have finished making notes, you save the PDF (under a new name if you want to retain the original), and it is ready to send it on its way.



This bare-bones approach is good enough for many purposes, and it has worked well for me in several projects. It minimizes fuss while preserving the method’s singular advantage: communicating corrections over the Internet, i.e., quickly and cheaply.<sup>1</sup>

Like other computer tasks, PDF commenting is no panacea; rather, it is a tool offering a finite set of features which may or may not serve for a given project. In other words, one should not suspend common sense. First of all, this is a method is for marking corrections: copy-

1. The help system for Acrobat 7 Pro has a section entitled “Initiating Document Reviews,” which suggests the process is complex to set up. It certainly can be for a highly structured system that sends out files and harvests comments. On a more modest scale, all that is necessary is for the PDF to be “enabled” for commenting in Adobe Reader. As mentioned elsewhere, this step requires Acrobat 7 Pro (though it can be skipped if those adding comments have the full version of Acrobat 5 or later). Then you transmit the file to whoever will be making corrections, perhaps as an e-mail attachment, and ask them to proceed.

editing on a grander scale may well go more efficiently on paper or, for those who prefer typing, in a word-processor re-write. I wouldn't start a new project with the aim of going paperless. Instead, I'd suggest getting one's feet wet with a late round of corrections, where changes should be fewer.

In making corrections via PDF, the goal remains the same as in the traditional process: to show each change precisely and unambiguously so that whoever must process the result does not waste time figuring out what is intended. This is second-nature to experienced editors and authors, accustomed to anticipating how readers read. The need for clarity is especially important in preparing material for publication—old hands will have seen the consequences of assuming infinite wisdom on the part of typesetter or proof-reader. The standard ways for marking changes in manuscripts and proofs evolved over centuries, and it would be foolhardy to ignore all that experience. We should seek instead to transpose the accumulated expertise for the keyboard. “Proof-readers’ marks” are still listed in the back pages of dictionaries, but newcomers may want to consult the various manuals offering detailed instructions on how to mark up paper manuscripts and proofs.

Finally, if the pages being corrected will end up on paper, it would be prudent to check a printout of the PDF before the job goes to press. Certainly there are advantages to proofing on screen—I know on-screen enlargement helps me find some kinds of typos—but other errors (e.g., type size) are easier to spot on paper. When making your printout, you want to be sure that Acrobat or Reader is printing at final size: this may seem elementary, but for some installations Adobe's default setting (on the printer menu) was to fit the PDF page to the printer's standard sheet; more than one production editor has claimed PDF type samples I submitted were strangely enlarged, not realizing that their Acrobat settings had “adjusted” my smaller-than-letter-size pages.<sup>2</sup>

2. Another default setting that can cause problems is that to “use local fonts,” i.e., show text exclusively with fonts actually installed on the viewing device, substituting as necessary and *ignoring any other font embedded in the PDF*. This can destroy careful typesetting and hide unusual characters. For Adobe Reader this setting is on the Document menu; for the full version of Acrobat it is on the Advanced menu.

### **PDF Commenting 101: Introduction**

“PDF” stands for “Portable Document Format.” PDF was originally intended as an electronic equivalent of a paper printout, and the analogy holds in many ways.<sup>3</sup> Like paper, a PDF is supposed to be stable, looking the same no matter the device used to view it (practically speaking, the device is another computer, or a printout from same). Adobe, the powerhouse of graphics software, came up with the format more than a decade ago and continues to refine it. Adobe had previously revolutionized the publishing industry with a “page description language” (Postscript) that offers very sophisticated control over the printing process. PDF is an outgrowth of Postscript, and by the fourth iteration PDF had shown the reliability and capability to become an essential standard in print publishing. It is nearly ubiquitous in computerdom.

Adobe’s major program for manipulating PDF files is Acrobat, and PDFs are frequently referred to as “Acrobat files.” Adobe released a free “Acrobat Reader” to allow reading PDFs on various computer platforms. Nowadays, new computers often come with Reader installed, in part so that manuals for hardware and software can be provided in electronic form, avoiding the expense of printed versions. Capital-R Reader can also be incorporated in web-browsers as a plug-in, allowing PDFs to be read on-line. Most purchased versions of Acrobat come with a program called Distiller, the original means for generating PDFs (and still offering more control over the process than the various PDF printer drivers). This three-part relationship, Acrobat, Reader, and Distiller, always caused a certain amount of confusion, which Adobe then increased by re-naming Acrobat Reader as Adobe Reader. Old hands continue to refer to PDFs as Acrobat files, but inevitably some neophytes speak of “Adobe files,” as if the company did nothing else. Terminological issues only get worse: the family of Acrobat products continues to grow, complicating the old short-hand of “full” version for referring to everything beyond the free Reader; plus, as discussed below, successive versions

3. In fact, many PDFs are generated by “printing” to a special printer driver; this capability is now built into the Mac’s OS X, and available for Windows via various add-ons.

of the PDF file format end up with two naming schemes, a file format number, and an Acrobat version number.

At first blush, the PDF format's emphasis on stability would seem to conflict with the notion of correcting the text it contains. However, the analogy with paper holds here as well: when you use PDF commenting to make corrections, you are not changing the text in the PDF; rather, you are marking the corrections that someone else will make in the master file(s): you will not see the actual corrections in place until a new PDF has been generated from the master. In fact, the process of "enabling" Reader Commenting in a PDF invokes several of the format's security features preventing modification of the underlying document; after all, anyone gathering corrections via PDF commenting needs to be sure they refer to precisely the same text.<sup>4</sup>

For Adobe's purposes, PDF is a way to participate in their vision of the workplace of the future, where much of the work will be collaborative and electronic. With PDF's place in print publication firmly established, this organizational aspect of the format continues to evolve. Thus there are now commenting tools specifically for marking edits—deleting and inserting text. Moreover, Acrobat Pro can help structure the process by which files are made available for review electronically, and then track the review process.<sup>5</sup>

Keeping comments separate from a PDF's content has several benefits, but there is one immediate drawback: there is no satisfactory way to get a printout of the marked-up PDF showing the comments in context on the page.<sup>6</sup> PDF Commenting is very much an electronic process, and once you commit to it you may be stuck with the process—another reason to start on a modest scale.

4. Full versions of Acrobat, and some specialized plug-ins thereto, permit directly editing the text in a PDF, but this task is not to be undertaken lightly.

5. The help system for Acrobat 7 Pro has a section entitled "Initiating Document Reviews." The directions are rather daunting, involving a mailing list among other preliminaries. Happily, smaller-scale projects work just fine without such elaboration: you send a personal e-mail to reviewers, attaching the PDF, and follow the progress the old-fashioned way, via personal communication.

6. Low-resolution screen shots are generally a compromise unworthy of an electronic "workflow."

Before getting fancier, it is worth noticing other details in Notes Tool comments. The upper left corner of the note's window shows the comment's type, along with the name of whoever wrote the comment; comments of the type "Note" also have a Note icon; on the upper right there is a time stamp and a "flyout" of options (click on the triangle to reveal the options menu). The time comes from the system clock. There may be value in keeping your computer's clock accurate in any case, but the real benefit of the time stamp is that if you have second thoughts after you've returned your corrections, and you send a later version, the recipient can sort comments chronologically to segregate the additions.



By default, comments insert the name used when the system logged in. No surprise there, but this detail is worth checking: if I borrow my teenager's laptop to work on a PDF, I don't want my corrections to bear his name. Commenting under the name "Administrator" is bad on two counts: first, it isn't very distinctive, and second, it suggests you are violating a basic rule of computer security: "Do not log in with administrator privileges for ordinary tasks." The preferences for the full version of Acrobat allow specifying the name to be used for all notes, while a note's options flyout will let you adjust the name for that note.

### **PDF Commenting 201: Intermediate**

The Note discussed above is only one type of comment among several others. The most useful for present purposes are those available through the Text Edits tool.

#### *"Text Edits"*

Simple Note Tool notes can work for marking corrections, but PDF commenting includes tools specifically designed for editing text. In Acrobat 7 Pro, these are available from the Commenting tool bar under "Text Edits." It is worth re-stating that, despite the terminology, these tools are for editorial mark-up rather than actually editing the text of the PDF.

Text Edits comments can indicate text to be inserted, crossed out or replaced. This anchoring to the PDF's text immediately distin-

guishes them from Note Tool comments: their positioning is more precise. For many projects, this precision will outweigh the simplicity of Note Tool comments.<sup>7</sup>

To insert text, click on the Text Edits tool, then click on the point in the PDF text where you want to make the insertion, and immediately begin typing: your keystrokes will appear in a blue-framed note of the type “Inserted Text.” If you want the addition to fall on a particular side of a punctuation mark, that is where you should click; the arrow keys can help position the cursor precisely if required. A blue caret appears in the PDF’s text at the precise insertion point, so it remains fixed through change in resolution. You can click on the caret later to review or revise your proposed insertion. The process could hardly be easier. My problem is that I tend to forget I am in Text Edits mode, and then when I click elsewhere in the PDF I accidentally create an empty comment which I must then delete.

Crossing out text is just as simple. Again in Text Edits mode, select the text to be deleted (click-and-drag with the mouse, or step through the text with the arrow keys while holding down the shift key), then right-click, and select Crossed Out Text. A red cross-out bar appears over the selection. Click on the bar and a red-framed note window appears, of the type “~~Cross Out~~,” where you can explain your marking.

Acrobat/Reader can also display the Comments List at the bottom of the screen. You can scroll through the list, and then click on an item to jump to (and highlight) its location on the PDF page. Notes keep their speech-balloon icon in the list, insertions are symbolized with a cap-T (presumably for “Text”) followed by a blue caret, and crossings-out get a cap-T with a red cross-out bar. A handy feature of the Comments List is that it can be sorted by various criteria (name, time, type, etc.).

Naturally, one can use Crossed Out and Insert Text at Cursor

7. The fact that the Note Tool’s speech-balloon icons allow re-positioning indicates that the icons are located with reference to boundary of the PDF page. Change the viewing magnification for the PDF, or open it on a device with a different screen resolution, and the icons’ positions are re-calculated, causing them to move. The difference can be more than a line of text, an obvious violation of the “clear and unambiguous” principle.

comments to indicate changes in wording, but there is also a special Replace Text comment combining elements from both. As with Crossed Out Text, the Replace Text option becomes available when you select text and right-click. As with Insert Text at Cursor, you can immediately key in the new wording, and it appears in a blue-framed note, this time of the type ~~Replacement Text~~. In the PDF text, the same, red cross-out bar appears over the selected text, with the blue insertion caret at the end. In the Comments List, Replacement Text is symbolized by a cap-T with a blue cross-out bar.

Obviously, the Replace Text tool is intended to reduce the number of comments, and worth using for that reason alone. In fact, using three comments for one basic change (a deletion, an insertion, and an explanatory note) is asking for trouble: the greater the number of individual comments, the easier it is for anyone reviewing them to miss one in the jumble. It is generally prudent to put the relevant information in as few comments as practicable.

### *Copy-and-Paste*

One can copy-and-paste text from the PDF itself into any type of comment. This is quite useful in any case, but it is especially handy for clarifying transpositions. These are a very common correction, and simple to mark with a pencil, but the case is altered when working at the keyboard. Copy-and-paste allows one to paste the copied selection into a comment two times, producing first an uncorrected version, and then a second version that can be edited to show the changes—a clear and unambiguous “before” vs. “after.” This technique has the further advantage that whoever prepares the corrected master can cut-and-paste the corrected version out of the comment into the master file without risk of re-keying errors.

Copy-and-paste makes use of the clipboard, which means the source is not limited to the text of the PDF under review: one can paste in text copied from an e-mail, a word-processor file, or anything else that allows pasting from the system clipboard. This can be especially handy for inserting special diacritics or Asian characters that may be hard to type directly via the Note Tool.

Note, however, that copy-and-paste may or may not convey typeface features, such as italics or boldface. If not, one can use

conventional means for conveying emphasis with plain ASCII—an underscore character or an asterisk at either end of the phrase.

### *Changing a Comments' Type*

Acrobat 7 does not allow changing the type for a given comment. Thus if you wish to combine an Inserted Text and a Crossed Out Text comment into a single comment of the type Replacement Text, you must delete the first two and start anew with the third. Careful use of copy-and-paste can at least preserve your keystrokes.

### *Effective Commenting*

Inserted, Crossed Out and Replacement Text are all sub-types of comments, which is to say they all provide a note window for annotations—an opportunity for clarification that generally should not be missed. On paper, the standard marking for correcting a comma into a period is to draw a small circle around it; adding a comma entails writing it in place and drawing a caret above. These hand-drawn details are important for “clear and unambiguous,” but obviously they do not translate directly to the keyboard. Simply typing a period or comma into an Replace Text or Inserted Text note is equivalent to leaving out the circle or caret when marking by hand, as the punctuation marks themselves are too small to be recognized quickly in the note window. In other words, transposition here involves typing a quick explanation in the comment, such as “comma to period” or “insert comma.”

Moreover, an empty comment looks like an accidental click: as mentioned above, it is all too easy to click on the text while in the wrong “mode” and insert an empty comment by mistake.

### *Still More Types of Comments*

There are other kinds of comments that can be applied to selected text. One is Highlight, which applies a yellow swath over it; click on the swath and a yellow-framed window appears where one can write notes under the comment type “Highlight”. “Add Note to Text” is another option that appears when you select text and right-click; this behaves similarly, but with the comment type “Comment on Text.” One can Underline selected text and get a green-framed note





window of type Underline; by default the underline is green and straight, though there is a “Squiggly” option. I am sure all of these can be useful, though I remain wary of losing something significant in a blizzard of notes and markings.

### *Separating Comments for Transit*

As computers grow more powerful, with ever-larger hard-disk capacities, file sizes are not the issue they once were—so long as you do not need to transmit them. True, the PDF format includes features to minimize file sizes, and it is perfectly feasible for a press-ready PDF for a 200-page book to fit on an old 1.4 MB floppy disk. On the other hand, a single piece of professional artwork can easily occupy many MB, and the PDF for even a brief illustrated article may well exceed an e-mail system’s limits on attachment sizes.<sup>8</sup> Happily, this does not mean you must forego the convenience of transmitting PDF comments via e-mail: the comments can be detached from the PDF and sent as a special PDF comment file. Under the Comments menu, you choose Export and then the “file” option; this will produce a new file, “filename.fdf” (by default, Windows systems hide file “extensions,” so you may need to turn them on to see the “fdf”).

Common sense suggests that before committing to this process of detaching comments it would be wise to test the technique with the recipient. (Some safeguards are built in: as mentioned previously, enabling PDFs for commenting with Adobe Reader prevents modification of the file to help coordinate later import of detached comments.) The ability to import comments offers a further advantage: one can collect comments from several reviewers’s copies of a given PDF into a single file, where they can be viewed in various ways (i.e., ordered by time, name, etc.).

### *Mark with Checkmark*

Just as one can check off corrections processed on a paper ms., PDF commenting has a similar feature, Checkmarks. Of course, making these stick means saving the file after applying them: whether this is

8. Note that such limits do not include processing the attachment: for example, the popular MIME protocol can increase file sizes by 30% or more.

worth changing the time stamp for the whole file will depend on the circumstances.

### ***PDF Commenting 401: Advanced Topics***

Those interested in more complex features will have to seek guidance elsewhere. Advanced topics include facilities for replying to comments, organizing a review process, and migrating comments.

#### ***Pre-Requisites***

##### *Software*

For the free Adobe (née Acrobat) Reader, commenting works only with version 7 or later, and then only if “Reader Commenting” has been “enabled” for a given PDF. “Full” (i.e., non-gratis) versions of Acrobat could use commenting as early as version 5, though more commenting features arrived in later versions. Enabling Reader Commenting for a PDF requires the “Pro” version of Acrobat 7 or later; those who lack that version can probably ask the compositor to do the enabling if the PDFs being corrected are typeset proofs.

##### *Software Version*

Enabling Reader Commenting is not the end of the story for PDF versions. If you send a PDF compatible with Acrobat 7 to someone who uses Acrobat or Reader version 5, their software will nag them to upgrade—and there are lots of folks who may prefer not to disturb their system; for one thing, the full version of Acrobat and Reader often cannot co-exist on the same computer, and those who have purchased an older, full version may not want to dump it for the sake of Reader 7 commenting. It might be wiser to offer two versions, one with Reader commenting enabled (and thus compatible with Acrobat 7), and another compatible with, say, Acrobat 4, allowing collaborators to choose.

All of this is made more complex by the numbering of the format versions. So far, each new version of Acrobat (and Adobe Reader) has been accompanied by a new version of the PDF format. Adobe

has chosen to number the PDF format versions as 1.x, where “x” corresponds to the Acrobat version number less one. Thus Acrobat 4 introduced PDF format no. 1.3, and Acrobat 7 brought us PDF format 1.6. The differences between PDF formats are often significant, but many users reference them indirectly, by the Acrobat version rather than the PDF format version. When you have Acrobat or Reader check a PDF’s “Document Properties,” it gives both kinds of version number. However, when you ask Windows Explorer to show a file’s Properties, WinXP gives only the 1.x version number; meantime over on the Mac platform, File Info for OS X 10.3 doesn’t bother with PDF versions at all.

Needless to say, those who are put off by the multiplicity of versions, or who prefer not to make corrections electronically for whatever reason, can at least halve the shipment of paper by printing the PDF locally, marking their corrections, and sending in the paper version.

### *Hardware*

Hardware can be a significant factor in making PDF commenting useful. Simply marking up the text may require viewing just one page at a time, but comparing the mark-up to the original, or inserting the corrections in the master file, will be much easier if one can see the original and corrected versions side by side on the screen: a large, high-res screen makes this much more convenient. Of course, a big screen is always nice, as displaying text oversized often makes errors more noticeable.

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As with so many kinds of work at the computer, there is no substitute for experience. If nothing else this little pamphlet, as a PDF with Reader Commenting enabled, can serve for experimentation. I will be grateful for corrections or comments sent to me in any format at [dgoodrich\[at-sign\]birdtrack.com](mailto:dgoodrich[at-sign]birdtrack.com).