This paper explains the basics of editing online documents: the issues, skills, strategies, and processes. Practical tips address editing the following: nonsequential content, structure and navigation, links, and online writing style.

Most of these strategies and tips apply to both online technical documents and general purpose Web pages. However, they do not apply to PDF or PostScript™ documents that are posted online for printing purposes only.

NEW SKILLS AND STRATEGIES

For online content to succeed, you must engage your readers while delivering the information they need—quickly and efficiently. Working with (or being) a good online editor is essential. Good online editors understand this new medium, and how it differs from print. They know which principles of editing to carry over from print, and which to discard or modify. They grasp the opportunities and pitfalls of hypertext. They also understand the tools of this medium, and at least the basics of how to use them.

In many ways, the task of editing documents for online presentation is similar to editing for print. However, there are some important differences. Online documents must facilitate reading on a computer screen (which has a much lower resolution than print), and they also must accommodate scanning and nonsequential access by the reader.

To achieve these goals, online editors should understand:

• How the traditional notions of audience, purpose, and organization differ in online media
• What constitutes effective online writing (style, organization, tone, and so on)
• What makes useful links (which includes choosing how many links to create, what to link to, where to place links on the page, and the style for wording link text)
• The basics of HTML coding (or, at the very least, the capabilities and limitations of HTML)
• The basics of working with non-text content such as images and sound files
• The principles of effective design for online documents

The role of the online editor

Ideally, an editor should be involved in the development of online documents from the earliest stages of planning. This strategy allows the editor to contribute expertise in adopting the reader’s perspective, as well as information design skills (which increase document usability through organization, style, and visual design). If editors get involved too late in the process, it is likely that all they can do is cleanup work—fixing typos, inconsistencies, and so on. It is also more likely that print materials will merely be recycled online, without taking into account the unique features of online media.

Below is a recommended process for editing online documents. This process was adapted from Carolyn Rude’s Technical Editing, Second Edition (1).

1. Identify the document’s readers and purpose. Think about your readers’ needs and their reasons for accessing the content. At the same time, consider discarding the strategy of identifying primary and secondary audiences, as well as the dualistic model of “novice” and “expert.” In the online world, these concepts might be simplistic and outdated since hypertext can address the needs of multi-level audiences.

2. Define the document structure and links. Devise a structure for the online document that suits its audience, purpose, and content. The structure should support online readers’ preference for scanning nonsequential content.

3. Define the style for screens. Work with a designer to define the style guidelines for the screens that users will see. Use templates to save time and to reduce inconsistencies.

4. Devise guidelines for online writing style. These guidelines can help make your online documents (and those of other writers in your organization) display a uniform style. They also enforce a similar tone for all external documents.

5. Do comprehensive editing. Review and edit for nonsequential content, structure and navigation, links, writing style, and visual design. If possible, begin these tasks early on and repeat them throughout the development cycle.

6. Do copyediting. Beyond the usual tasks, copyediting online documents also involves checking for consistency in visual design and testing links.

7. Assist with usability testing. Editors can serve as formidable usability testers, and they should be part of this process. However, others should be involved as well. (Being too
familiar with a document can lead an editor to miss usability problems that others might spot.) Test the tasks that readers probably will want to perform, check that navigation is easy and intuitive, and evaluate reading comprehension.

8. Help with maintenance. The editor might not be responsible for maintaining content over time, but could play a role in this process, especially when content changes arise.

EDITING NONSEQUENTIAL TOPICS

Effective hypertext forces writers and editors to discard traditional notions of paragraph flow and sequential organization, which are required in quality printed documents. In hypertext, users orchestrate their own transitions through associative and navigational links. In effect, readers create their own transitions as they move among sections of a document. The downside is that sometimes context is lost, which means that readers might get confused or disoriented. Therefore, online documents should support nonsequential and sporadic reading. This strategy requires that the document is broken up into coherent, self-contained topics that are understandable if read out of sequence.

Make Topics Short and Self-Contained

Each topic should address only one main idea, and not require the reader to have previously seen any other part of your document. To counter loss of context, repeat contextual information on each page, when needed. And provide links to related information. Remember that readers dislike scrolling through many screens of text. Also, follow these tips:

- **Get right to the point.** Never bury your main message in the middle of a paragraph or page. State your main point or conclusion up front. As warranted, create separate paragraphs or pages to emphasize other points.

- **Use more heads, lists, and tables.** The frequent use of heads breaks up rivers of narrative text. Bulleted lists highlight information in a concise format that encourages scanning. Tables enhance reader comprehension by organizing data compactly in a logical, readable format.

- **Give the precise location of related information.** Avoid the “as-shown-above” syndrome. Do not write (or edit) as if your users will be reading the document from beginning to end. If you refer to another section of the document, consider creating a link or name the section (“Example: Installing a Hard Drive”).

- **Make pronoun references explicit.** Whatever “it” or “this” refers to might have scrolled off the reader’s screen. Unclear pronouns also annoy readers.

Create Descriptive Heads and Page Titles

Heads and page titles should clearly explain the topic addressed on each page in terms that reflect your reader’s perspective. Avoid cute, clever, or cryptic heads, as well as heads that reflect only the writer’s perspective. Also avoid generic heads such as “Introduction.” Remember: when readers scan a page, all they really “see” at first are the page title and heads. Even when context is supplied by surrounding text or graphics, the limitations of screen reading make that context less effective in terms of giving readers clues about meaning. Therefore, the page title and heads must represent the content of that page well.

Heads and page titles are important types of microcontent, but there are others: link text, ALT text, subheads, and highlighted words. Microcontent introduces, summarizes, or enhances macrocontent (the real “meat” of your document). In the online world, when other sites link to or discuss your document, the microcontent that you create might be displayed out of context. So, your prospective readers could have trouble discerning the nature of your document.

Usability expert Jakob Nielsen (2) recommends that microcontent be an ultra-short abstract of its associated macrocontent. Use plain language, and place the most important words first to help readers scan text more effectively.

EDITING STRUCTURE/NAVIGATION

Often, it can be difficult to see how the various parts of an online document are related to each other, unlike in print. Online readers only view one screen at a time, making it harder to envision the entire structure. Various limitations—
small screen size, the slowness of scrolling compared to turning pages, and lower text resolution—require readers to depend on explicit structural cues rather than the “look and feel” of the whole document. To improve the structure and navigation of an online document, follow these tips.

**Make the Structure Obvious and Easy to Navigate**

A reader’s path through your online document might be unpredictable, but the structure of that document should not be. Readers require a clear sense of how the document is organized so they can move through its structure easily. An online editor, your goal is to reduce the risk of disorientation. Readers should not become “lost in cyberspace”—retracing their steps, or moving forward with no clear idea of where they are going. An effective hypertext structure:

- Is organized according to a simple, meaningful pattern
- Offers links that anticipate readers’ needs
- Features consistent visual design (such as the consistent placement of navigation links, or the use of color and icons to identify different sections)

**Clearly Identify Main Structural Divisions**

Your document’s home page (or opening screen) can identify the main structural divisions of the document and also function as a table of contents. If this page establishes a consistent visual design, it teaches readers where to look for various types of information such as navigation links. However, remember that readers can enter your document at other points. Therefore, ideally, you should identify and link to your document’s main structural divisions from every page.

**Anticipate Readers’ Likely Paths**

When considering which links to create, anticipate your readers’ probable paths. Which associations would benefit them? Let their needs, expectations, and interests guide your link choices. The goal is to provide readers with opportunities—not to order them around. However, these opportunities should not be endless. You must still set priorities in your document and point readers in relevant directions.

Also, watch out for “page turning.” Page turning occurs when you break up text into sequential chunks and include at the bottom of each page: “Click here for next page.” Page turning is a poor solution to the problem of scrolling text. A better solution is to redesign the text and structure of your document to take advantage of the power and versatility of hypertext. Try to find a way to provide access to all major parts of the document from any given page.

**EDITING LINKS**

Online readers often experience disorientation or “wayfinding” problems when traversing links. Therefore, as an online editor, you should ensure that your readers remain fully oriented and in control as they navigate through your document (or to other documents). Follow these tips to keep readers oriented.

**Prevent Readers From Getting Lost**

Effective links offer contextual clues about their link destination. However, all too often, links are ambiguous, dumping readers into unfamiliar territory with insufficient explanation. To reduce the likelihood of disorientation, choose links that create adequate context for readers. Choose carefully which words you designate as the link, as well as which text surrounds that link. If possible, supply explanatory text before the actual descriptive link. This strategy helps readers understand where each link leads and why it was chosen.

**Good example** of descriptive link text and preceding explanatory context:

For a list of Sun Enterprise 3500 system components, see Appendix C, Illustrated Parts Breakdown.

**Poor examples** of link text:

- Click here to learn more.
- There are lots of resources for software engineers.

Keep in mind that blind readers can configure their Web page audio reader to read only the link text on a page. So, a page full of “click here” links provides virtually no context.

Sometimes, you might want to explicitly cue readers when a link is external (and takes them away from your site), as opposed to internal (points them to other parts of your document or site). This strategy helps when the sites you link to might not be immediately distinguishable from your own. Icons can serve as cues. For example, on the Web site of the U.S. Environmental Protection Agency, external links are marked with an “Exit EPA” icon. However, in most cases, you can simply provide sufficient context in your link text.

If the possibility of losing your audience in the middle of your document concerns you, consider placing all external links in a resource section at the end of the document.

**Create Links That Aid Scanning**

Online readers tend to quickly scan a document before they invest their attention in carefully reading it. Links, which stand out visually from the rest of the text, are one of the ele-
ments on a page that attract attention during scanning. Therefore, the links on a page should collectively offer context about what that page contains—not just about where each link leads.

Imagine that your page contains only a title, head, subheads, and links (as well as images, if any). Would those elements alone give you a basic idea of what you would find if you read the whole page? Also, pay attention to the length of your links. One to three words generally works best, as long as those words are “context-rich.” Usually, a link that runs the full length of a line or sentence is too difficult to scan.

Include Links That Readers Expect to Find

In part, you include links to answer readers’ questions (such as, “Where can I find more details on Topic X?”). Readers typically come to your document searching for information, so you should try to provide what they are looking for. Ideally, link text should correspond to readers’ search tasks. Check that the text of all or most of the links in a page are conceptually similar to the title or heads that appear on that same page—or to the title or heads on the destination page.

Consider the example of a Web page entitled “The Portal for Company Policies and Procedures.” Links that would make sense on this page might include:

- For information, support, and resources necessary to act with integrity and within the laws that affect our business, see the Standards of Business Conduct Policy.
- To help minimize our exposure to the potential loss or compromise of proprietary information and intellectual work, review the Information Protection Policy.

...And then the same text, but with different links that do not correspond conceptually to the theme of the page:

- For information, support, and resources necessary to act with integrity and within the laws that affect our business, see the Standards of Business Conduct Policy.
- To help minimize our exposure to the potential loss or compromise of proprietary information and intellectual work, review the Information Protection Policy.

Try Weaving Link Text Into Your Prose

One way to keep your Web text from sounding choppy is to craft text that would still read well if there were no links. In other words, do not directly refer to the mechanism of the Web or hypertext.

Good examples of link text:

- For configuration procedures for multiple realms, see Configuring Cross-Realm Authentication.
- The docs.sun.comSM Web site enables you to access Sun documentation online. Go to http://docs.sun.com.

Poor examples of link text:

  Click here for configuration procedures.
  Sun has a Web site for its documentation.

The benefits of weaving link text into prose should be weighed against the following: At least one study shows that online readers can find information more easily through lists of links, rather than links embedded in text. If you create a list of links, annotate each link so that your readers can decide which, if any, to traverse.

Do Not Offer Too Many Links

Besides the fact that too many links can create a maintenance headache, the overuse of links can cause problems for readers. Offering too many links on a page dilutes the message of that page and can confuse readers with tangential digressions. As an editor, your job is to guide readers and filter their choices. Also, links disrupt the narrative flow of the text by inviting readers to go elsewhere. Unless that is your goal, link sparingly, especially to other sites. You might want to link liberally to your own pages.

Beware of creating documents that resemble mere tables of contents or resource lists. A well-organized, annotated list of links can increase the value of a document—but the document still should offer substantive content beyond links.

Warn Readers About Unexpected Link Destinations

Tell readers when following a link:

- Opens another document or application
- Takes them to another site
- Requires them to register or enter a password to access the destination
- Leads to a large file

For example, to avoid frustrating readers, you could parenthetically provide the file size in kilobytes (KB) or megabytes (MB) as necessary.
EDITING ONLINE WRITING STYLE

To edit for an effective online style, you should vigorously apply the principles of clear writing while attending to the differences between online and print texts. Short topics written in short paragraphs using simple language are ideal.

Make the Writing Concise and Direct

Each word must count. The limitations of screen reading dictate that text get right to the point. Tightening up the writing can lead to a shortened document, making it less likely that readers will become fatigued. However, watch out for choppiness. The need for coherence overrides the need for brevity. If your text starts to sound choppy, you might have tightened it up too much.

To tighten the text, follow these tips:

• Use the active voice. Do not write like a bureaucrat.
• Use primarily simple declarative and imperative sentence structures. Embedded clauses risk falling on the boundary between two “scrolling zones.”
• Use affirmative sentence structure wherever possible. Specify what is true, not what is false.
• Avoid turning verbs into nouns. For example, use “investigated” rather than “conducted an investigation.”
• Eliminate prepositional phrases wherever possible.
• Use concrete, specific words, not abstract words.
• Adopt the reader’s vocabulary and perspective, when possible. Do not be afraid to use the second person, “you.”
• Avoid unnecessary jargon.
• Express ideas precisely. For example, state exact quantities.

Keep Paragraphs Short

Short paragraphs offer readers much needed visual breaks. Three sentences or less for each paragraph is ideal. Often, one-sentence paragraphs are acceptable, especially if text is displayed in narrow columns.

To keep paragraphs short, eliminate unnecessary material. Where possible, use tables, charts, bulleted lists, and graphics to express ideas more concisely. Also, use links to cross-reference material, rather than including it more than once in the document. (This strategy works for related topics, definitions, and similar supplementary material.)

COPYEDITING

The editorial process is not complete without copyediting and proofing. These processes are much the same for online and print documents—checking for correctness (spelling, grammar, and punctuation), consistency of capitalization and other mechanics, accuracy of information, and completeness. Copyediting online documents also requires that you scan the final pages for consistency in visual design, test links, and evaluate the document for readability (since screen text is less legible than quality print text).

At this stage of the process, basic HTML skills are very valuable to the online editor. It helps if you can go into the HTML document and make minor changes directly. Making handwritten markups to a printout and handing it to someone else to implement is usually too slow, and opens the process to the possibility of last-minute errors. However, if you spot last-minute design issues (that affect page elements other than text), discuss them with the designer rather than implementing them yourself. (Unless, of course, you happen to be the designer as well as the editor.)

Use Consistent Text Formatting

From the reader’s perspective, variations in text formatting signal different types of information as well as structural divisions in a document. Make these variations consistent.

Often, the font is not specified in HTML documents. In such cases, the text displays in the default font and size specified by the reader’s Web browser. (In fact, this practice usually is desirable, since you never know what fonts readers have on their computers.) Therefore, keep in mind that line breaks, paragraph lengths, and other text elements might look slightly different to each reader. Check whether the overall “look” of text on a page presents any obvious problems with various common fonts and type sizes.

Using a style sheet and template throughout the editorial process encourages consistency in font, type size, and spacing.

Watch Out for Arbitrary Shifts in Color

Although color selection is a design issue, the application of color can be an editorial issue when it is used to signal different types of information in a document, or to differentiate document sections. Color can enhance comprehension, or it can make the document look confusing or cluttered. For instance, a deliberate change of banner color can signal a different type of content. However, an arbitrary shift of color (for example, of the background) can cause readers to assume incorrectly that something significant about the content has changed.
If link colors are specified in your HTML document, check that these colors are applied consistently throughout the work. Do all links not yet followed appear in the same color? Do all links previously visited appear in the same color? Do different link colors indicate different types of links, and is this distinction made clear to the reader?

**Verify That Links Go Where They Promise**

Before a document “goes live,” all internal and external links should be tested to make sure that they work as intended. Some Web development environments or tools (such as Macromedia DreamWeaver™ or Allaire HomeSite™) offer automated link checking. If your document has many links, and if this option is available to you, use it—it might save you a lot of time in spotting broken links (that yield a “404 file not found” or other error). However, keep in mind that automated link checking usually cannot tell you if a link leads to the wrong page. Therefore, if you have time, you should manually check all or most links to ensure that they not only work, but, in fact, lead to the correct destination.

Also, review your link text and the text surrounding your links one last time to make sure that all links offer clear context as to where they will take the reader.

**Ensure That Text is Readable**

Text is less legible on the screen, so online editors should ensure that words and phrases are legible in this display environment. The following suggestions for ensuring accurate reading were adapted from William Horton’s *Designing and Writing On-Line Documentation* (3).

- **Check the small words.** Review the use of small words that can change the meaning of an entire sentence (such as “all,” “if,” “or,” “any”). If any possibility of misreading exists, consider rewording the affected sentences. Or consider emphasizing these words by italicizing them or displaying them in ALL CAPS.

- **Avoid “overabbreviation.”** Abbreviations are easily misread and can confuse readers. If you use abbreviations in your document, apply only common ones and use them consistently.

- **Be careful with acronyms.** Sometimes, acronyms can improve readability, but if overused or misused, they create confusion. On the first use on each page, spell out the term in full and then immediately display the equivalent acronym in parentheses. Re-identify the acronym on each page of the document. Also, if the acronym is used on a long, scrolling page, consider identifying the acronym at two or more places on that page.

- **If possible, use only standard, easily read symbols.** These includes letters, numbers, punctuation marks, and standard symbols (such as $, *, @, %, &, ©). If your document includes non-English words or names, you might have to use special characters (such as ñ or ö). So, use special characters where appropriate.

**Check Identifying Information**

Each page in your document or site should answer these questions for readers: “Who owns this site or document?” “What do they do?” “How can I contact them?” Include the following identifying information and present it consistently:

- Name and email address (as a mailto link) of the writer or content manager, and of the site’s Webmaster
- Street address, fax and telephone numbers, and name(s) of people who will answer questions (assuming you want to hear from your readers in more ways)
- Date of the last update for each Web page
- A copyright statement

Finally, make sure that you consistently cite or reference sources of information throughout your document.

**REFERENCES**


**Alysson M. Troffer**  
Technical Editor, Solaris Technical Publications  
Sun Microsystems, Inc.  
500 Eldorado Blvd., UBRM05-171  
Broomfield, CO 80021 USA  
(303) 272-7962  
alysson.troffer@sun.com

An STC member, Alysson Troffer edits computer documentation and has written a chapter on online writing style for the *Sun Editorial Style Guide*. She received her BS in Psychobiology from Albright College in Reading, PA and her MA in English from Northern Arizona University in Flagstaff, AZ.